CA2 SA
MR 10.
R21

...van
...Mines
Petroleum
and Natural Gas

Miscellaneous Report 90-1

ISSN 0707-2562

Reservoir Annual 1989

Saskatchewan

92-02172/

SASK. LEGISLATIVE LIBRARY
MAY 24 1991
REGINA

PREFACE

The 1989 Reservoir Annual has been compiled to consolidate pertinent information on all oil and gas reservoirs in Saskatchewan into a convenient reference manual. The main sections of the report contain oil and gas reserves data, development and producing data and information concerning enhanced recovery projects. The remaining sections present related reservoir information.

Publication of the Reservoir Annual commenced in 1963 and has since undergone a number of changes to improve the presentation and to increase the amount of information that is useful to both industry and government.

I would like to acknowledge the assistance of the oil and gas companies operating in Saskatchewan for submitting to the department much of the material that has been used in the preparation of this report.

Rick Swenson
Minister of Energy and Mines

Although the Department of Energy and Mines has exercised all reasonable care in the compilation, interpretation and production of this report, it is not possible to ensure total accuracy, and all persons who rely on the information contained herein do so at their own risk. The Department of Energy and Mines and the Government of Saskatchewan do not accept liability for any errors, omissions or inaccuracies that may be included in, or derived from, this report.

TABLE OF CONTENTS

SECTION

INTRODUCTION ..... A

POOL AND AREA MAPS ..... B

- Production and Disposition Areas
- Pool Location Maps

RESERVOIR DATA RESERVES AND PRODUCTION – OIL C

- Five Year Oil Summary
- Area I – Heavy
- Area II – Heavy
- Area II – Light
- Area III – Medium
- Area IV – Medium
- Area IV – Light

RESERVOIR DATA RESERVES AND PRODUCTION – GAS ..... D

- Five Year Gas Summary
- Non-Associated Gas
- Associated Gas
- Dissolved Gas

OIL AND GAS UNITS AND ENHANCED RECOVERY PROJECTS ..... E

- Oil and Gas Units
- Non-Unit Projects

DEVELOPMENT DATA ..... F

- Oil Pools
- Gas Pools
- Spacing Areas

TYPICAL WELL LOGS OF PRODUCING ZONES ..... G

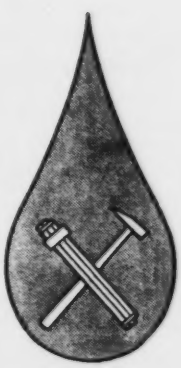
POOL PRESSURE DATA ..... H

- Oil Pools
- Gas Pools

MPR FACTORS I

GAS PLANT PERFORMANCE GRAPHS ..... J

INTRODUCTION



INTRODUCTION

The 1989 Reservoir Annual is published by Saskatchewan Energy and Mines to provide current statistical information with regard to performance and reservoir parameters of Saskatchewan oil and gas pools. The 1989 edition is subdivided into ten sections, each dealing with a specific type of reservoir data. Section B presents maps showing oil and gas pools, production and disposition areas, well spacing areas and other related information. Of considerable importance are sections C and D, which provide reservoir data and reserves for all provincial oil and gas pools broken down by unit and non-unit areas. Section E contains a listing of oil and gas units and provides such information as operator, producing zone, number of active wells and project data such as pattern type, commencement date and injection rates. The section titled "Development Data" presents information on natural depletion mechanism, enhanced recovery projects, well spacing and target areas for all Saskatchewan oil and gas pools. The remaining four sections include illustrations of typical producing well logs, pool pressure data, Maximum Permissive Rate factors and gas plant performance plots. All reserve, production, pool boundary and well spacing information contained in this publication is as of December 31, 1989, unless otherwise noted.

The reserve values contained in the Reservoir Annual are "established reserves" as adopted from the recommendations of The Joint Industry/Government Task Force on Uniform Reserves Terminology. Established reserves are defined as those reserves recoverable under current technology and present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgement portion of contiguous recoverable reserves that are interpreted to exist from geological, geophysical or similar information, with reasonable certainty.

Provincial oil production in 1989 dropped to about 11.7 million cubic metres, reflecting good oil market conditions, but a reduced level of exploration and development activity. Initial established oil reserves increased by over 6.5 million cubic metres due to the addition of 344 new producing oil wells and 17 new or expanded waterflood projects. This was increased to about 10.3 million cubic metres because of better definition of existing reserves. The majority of reserve additions due to drilling were again in Area IV (Weyburn-Estevan), while most of the increase due to waterflood activity was in Area I (Lloydminster). Yearly production exceeded the provincial reserve increases by about 1.4 million cubic metres, resulting in a remaining established reserve figure of 119.3 million cubic metres at year end. Table 1 provides a more detailed look at the changes in oil reserves.

Natural gas production in 1989 was 5.73 billion cubic metres, exceeding the 1988 production by 40%. Initial reserves of gas were increased by 11.16 billion cubic metres in 1989, resulting in a net increase of 5.42 billion cubic metres and a remaining established reserves year-end value of 79.79 billion cubic metres. These reserve increases were largely due to the continued high rate of gas well drilling, which resulted in 960 completions in 1989.

The objective of this publication is to provide subscribers in the oil and gas industry with reliable and pertinent information on provincial oil and gas resources and any suggestions or comments on improvements in this regard would be welcomed by Saskatchewan Energy and Mines.

TABLE 1

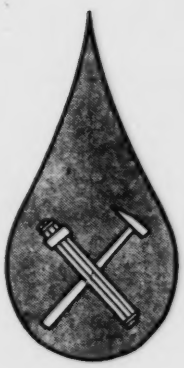
REMAINING OIL RESERVES IN SASKATCHEWAN

(Million Cubic Metres)

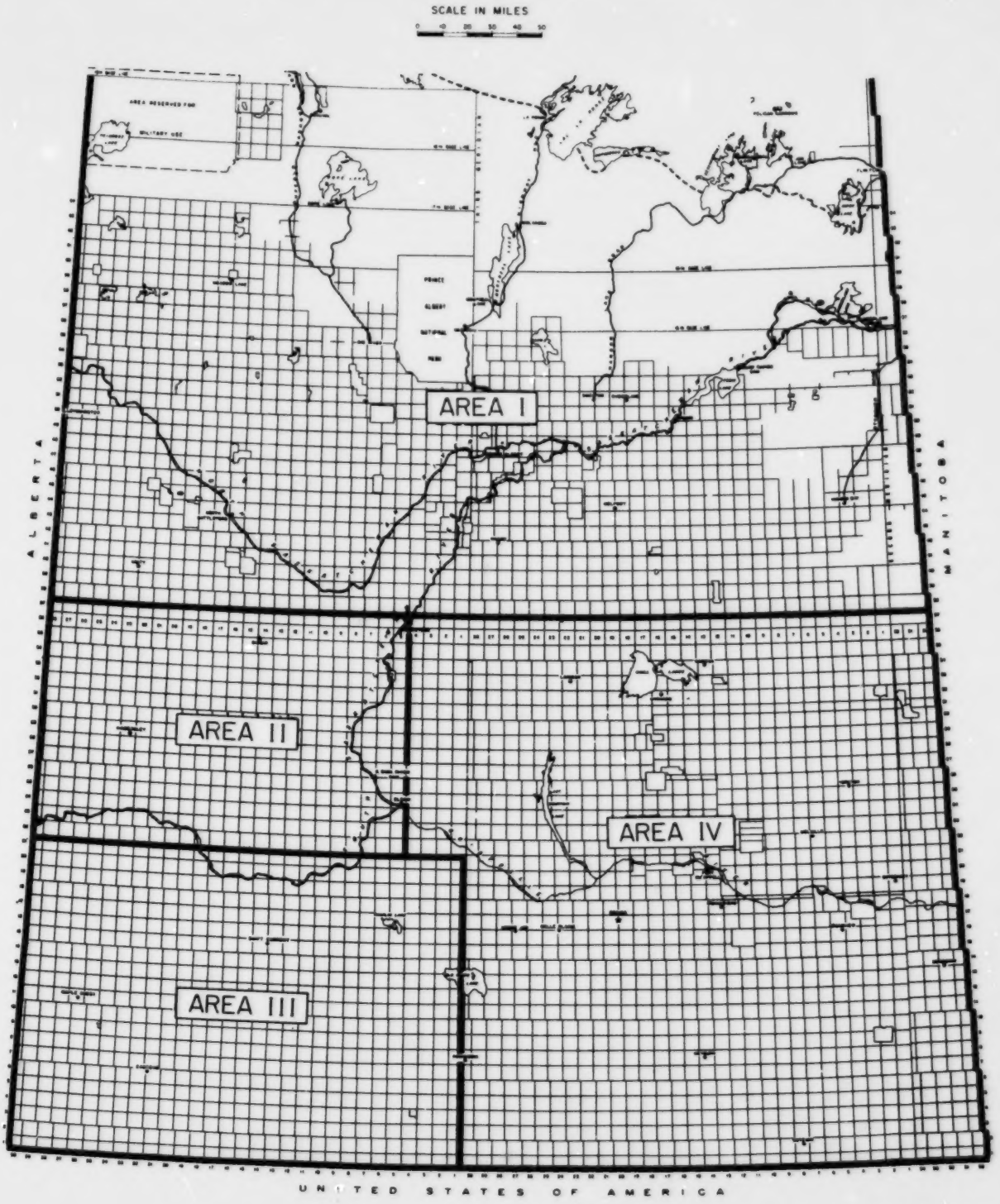
Area	Remaining Established Reserves (Dec. 31/88)	1989 Additions to Reserves			1989 Production	Net Change in Reserves During 1989	Remaining Established Reserves (Dec. 31/89)
		Revisions	Drilling	Total			
Area I – Heavy	22.762	+5.334	+0.305	+5.639	2.571	+3.068	25.830
Area II – Heavy	12.731	+0.447	+0.122	+0.569	0.850	– 0.281	12.450
Area II – Light	9.660	– 1.837	+0.217	– 1.620	0.920	– 2.540	7.120
Area III – Medium	22.387	+1.422	+0.331	+1.753	1.992	– 0.239	22.148
Area IV – Medium	25.033	– 1.075	+2.138	+1.063	2.380	– 1.317	23.716
Area IV – Light	28.127	+1.050	+1.811	+2.861	2.989	– 0.128	27.999
PROVINCIAL TOTAL	120.700	+5.341	+4.924	+10.265	11.702	– 1.437	119.263

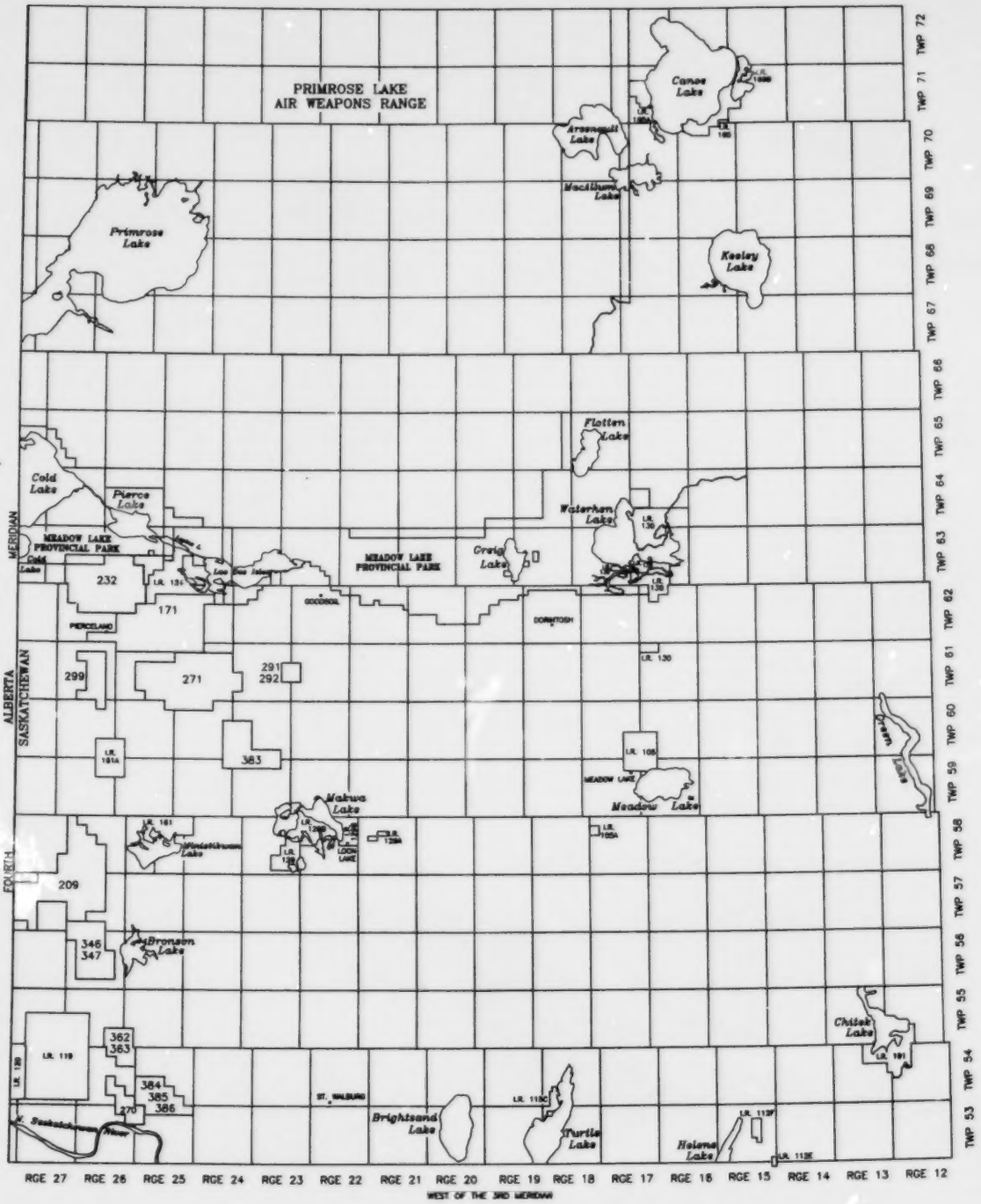
POOL AND AREA

MAPS



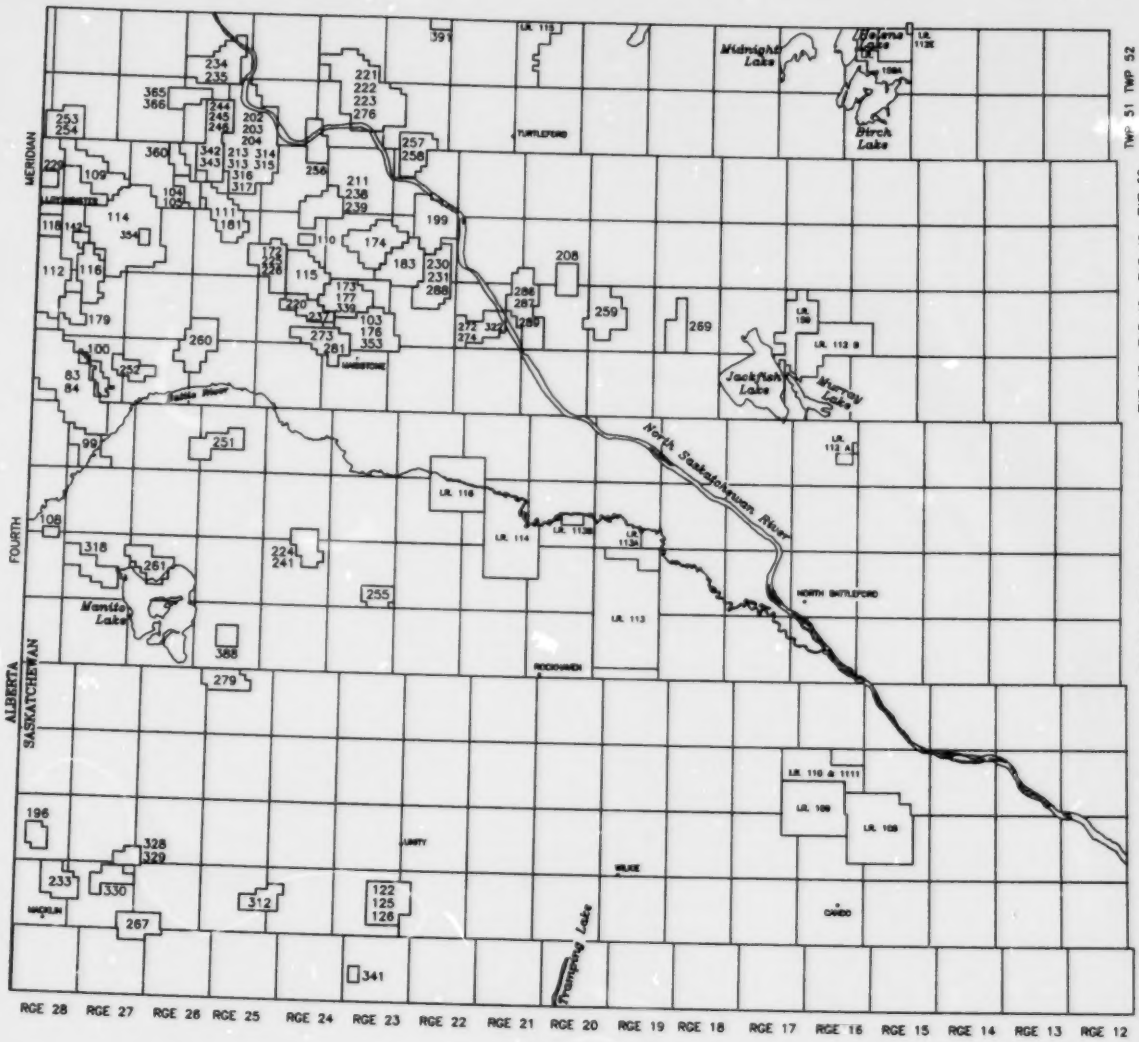
SASKATCHEWAN
PETROLEUM AND NATURAL GAS
PRODUCTION AND DISPOSITION AREAS





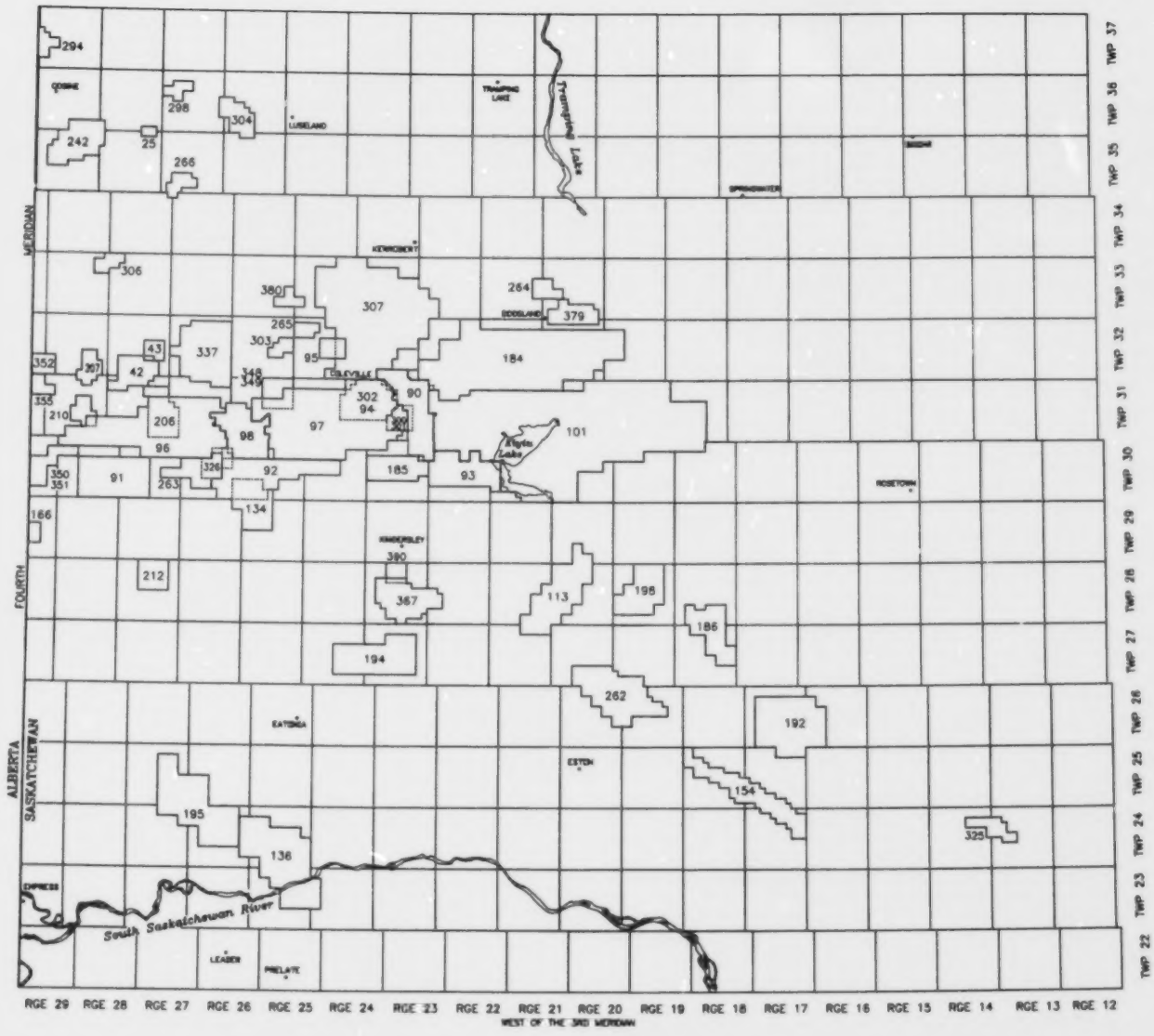
OIL & GAS POOLS – AREA I – NORTH HALF

171 Beacon Hill Mannville Sand Gas Pool
209 Peck Lake Colony Sand Gas Pool
232 Pierceland Mannville Sand Gas Pool
270 Fort Pitt Mannville Sand Gas Pool
271 Beacon Hill South Mannville Sand Gas Pool
291 Flat Valley St. Walburg Sand Gas Pool
292 Flat Valley Colony Sand Gas Pool
299 Beacon Hill West Mannville Sand Gas Pool
346 Bronson Lake Colony Sand Gas Pool
347 Bronson Lake Waseca Sand Gas Pool
362 Fort Pitt North Colony Sand Gas Pool
363 Fort Pitt North Waseca Sand Gas Pool
383 Makwa Mannville Sand Gas Pool
384 Frenchman Butte St. Walburg Sand Gas Pool
385 Frenchman Butte Colony Sand Gas Pool
386 Frenchman Butte Waseca Sand Gas Pool



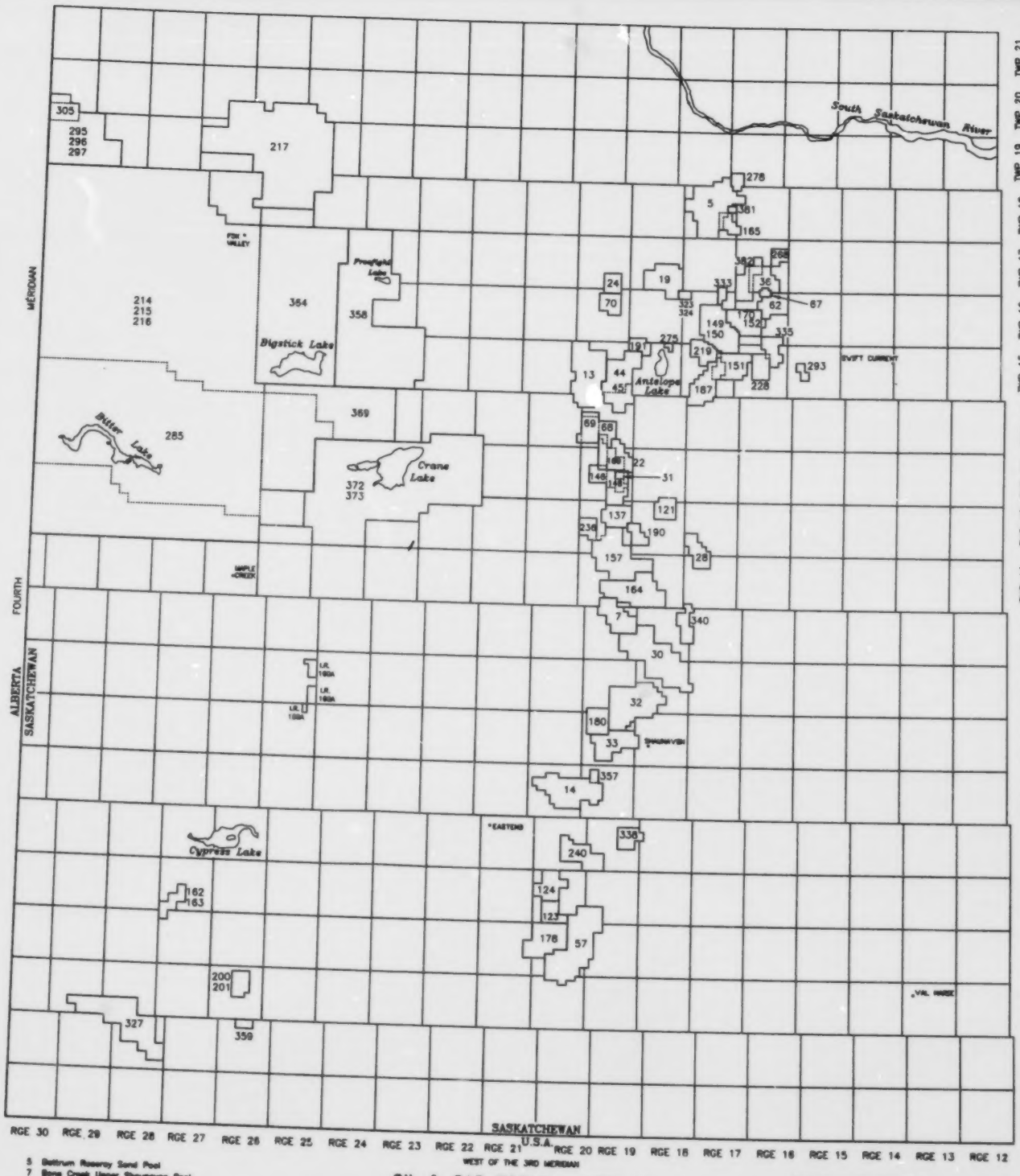
OIL & GAS POOLS – AREA I – SOUTH HALF

83 Epping Sparky Sand Pool
84 Epping G.P. Sand Pool
99 Epping South Sparky Sand Pool
100 Lone Rock Sparky Sand Pool
103 Golden Lake South Sparky Sand Pool
104 Landrose Waseca Sand Pool
105 Landrose McLaren Sand Pool
108 Marsden Sparky Sand Pool
109 Northminster Sparky Sand Pool
110 Low Lake Waseca Sand Pool
111 Big Gully McLaren Sand Pool
112 Silverdale Sparky Sand Pool
114 Aberfeldy Sparky Sand Pool
115 Lashburn Waseca Sand Pool
116 Dulvich Sparky Sand Pool
118 Lloydminster Colony Sand Gas Pool
122 Unity South Viking Sand Gas Pool
125 Unity South Sparky Sand Gas Pool
126 Unity South Unity Sand Gas Pool
142 Dulvich North Sparky Sand Pool
172 Forest Bank Mannville Sands Pool
173 Golden Lake North Waseca Sand Pool
174 Gully Lake Waseca Sand Pool
176 Golden Lake South Waseca Sand Pool
177 Golden Lake North Sparky Sand Pool
179 Furness Sparky Sand Pool
181 Big Gully Waseca Sand Pool
183 Dee Valley Waseca Sand Pool
196 Eyehill Cummings Sand Pool
199 Standard Hill Waseca Sand Pool
202 Tangleflags Lloydminster Sand Pool
203 Tangleflags Sparky Sand Pool
204 Tangleflags G.P. Sand Pool
208 Edam North Waseca Sand Pool
211 Pikes Peak Waseca Sand Pool
213 Tangleflags Mannville Sands Pool
220 Lashburn South Waseca Sand Pool
221 Celtic Waseca Sand Pool
222 Celtic Sparky Sand Pool
223 Celtic Mannville Sand Pool
224 Fremont Waseca Sand Pool
225 Forest Bank Sparky Sand Pool
226 Forest Bank Waseca Sand Pool
229 Lloydminster Sparky Sand Pool
230 Dee Valley East Waseca Sand Pool
231 Dee Valley East Sparky Sand Pool
233 Macklin Sparky Sand Pool
234 Tangleflags North G.P. Sand Pool
235 Tangleflags North Lloydminster/Cummings Sand Pool
237 Lashburn South Sparky Sand Pool
238 Pikes Peak Sparky Sand Pool
239 Pikes Peak G.P. Sand Pool
241 Fremont Sparky Sand Pool
244 Tangleflags West Sparky Sand Pool
245 Tangleflags West G.P. Sand Pool
248 Tangleflags West Lloydminster Sand Pool
251 Nolitburg McLaren Sand Pool
252 Buzzard Lloydminster Sand Pool
253 Northminster North Sparky Sand Pool
254 Northminster North G.P. Sand Pool
255 Rolphinton Sparky Sand Pool
256 Tangleflags East McLaren Sand Pool
257 Westhazel Sparky Sand Pool
258 Westhazel G.P. Sand Pool
259 Edam Waseca Sand Pool
260 Lashburn West Sparky Sand Pool
261 Marsden South Sparky Sand Pool
267 Senlac Lloydminster Sand Pool
269 Cavalier Spinney Hill Sand Gas Pool
272 Rush Lake Waseca Sand Pool
273 Maidstone McLaren Sand Pool
274 Rush Lake Sparky Sand Pool
278 Celtic G.P. Sand Pool
279 Writer Cummings Sand Pool
281 Maidstone Waseca Sand Pool
288 Edam West Waseca Sand Pool
287 Edam West Sparky/G.P. Sand Pool
288 Dee Valley East Mannville Sands Pool
289 Edam West Mannville Sands Pool
312 Salt Lake Lloydminster Sand Pool
313 Tangleflags Second White Specks Gas Pool
314 Tangleflags SE Wellborg Sand Gas Pool
315 Tangleflags Colony Sand Gas Pool
316 Tangleflags McLaren Sand Gas Pool
317 Tangleflags McLaren Sand Pool
318 Manito Lake Sparky Sand Pool
322 Rush Lake Mannville Sands Pool
328 Evesham North McLaren Sand Pool
329 Evesham North Sparky Sand Pool
330 Evesham Sparky Sand Pool
339 Golden Lake North Mannville Sands Pool
341 Ear Lake Waseca Sand Pool
342 Tangleflags West McLaren Sand Pool
343 Tangleflags West Mannville Sands Pool
353 Golden Lake South Mannville Sands Pool
354 Aberfeldy G.P. Sand Pool
360 Big Gully North Lloydminster Sand Pool
365 Hillmond Sparky Sand Pool
366 Hillmond G.P. Sand Pool


ALBERTA
SASKATCHEWAN
FOURTH MERIDIAN
WEST OF THE 3RD MERIDIAN
South Saskatchewan River
Frenchman Lakes
Kinyto Lake
RGE 29 RGE 28 RGE 27 RGE 26 RGE 25 RGE 24 RGE 23 RGE 22 RGE 21 RGE 20 RGE 19 RGE 18 RGE 17 RGE 16 RGE 15 RGE 14 RGE 13 RGE 12
TWP 37 TWP 36 TWP 35 TWP 34 TWP 33 TWP 32 TWP 31 TWP 30 TWP 29 TWP 28 TWP 27 TWP 26 TWP 25 TWP 24 TWP 23 TWP 22

OIL & GAS POOLS – AREA II

25 Plover Lake McLaren Sand Pool
42 North Hoosier Bakken Sand Pool
43 North Hoosier Basal Blairmore Sand Pool
90 Eureka Viking Pool
91 Milton Viking Sand Gas Pool
92 Whitesides Viking Sand Pool
93 Avon Hill Viking Pool
94 Coleville Bakken Sand Pool
95 Buffalo Coulee Bakken Sand Pool
98 Hoosier Viking Gas Pool
97 Coleville–Smiley Viking Gas Pool
98 Smiley–Dewar Viking Pool
101 Dodsland Viking Sand Pool
113 Brock Viking Sand Gas Pool
134 Whitesides Ribstone Creek Sand Gas Pool
136 Bayhurst Viking Gas Pool
154 Plato Viking Pool
166 Alsask Basal Blairmore Sand Pool
184 Dodsland North Viking Gas Pool
185 Lucky Hills Viking Pool
186 Totnes Viking Sand Gas Pool
192 Greenan Viking Gas Pool
19- Glidden Viking Gas Pool
195 Bayhurst West Viking Gas Pool
198 Brock East Viking Gas Pool
206 Hoosier Bakken Sand Pool
207 Fusilier Bakken Sand Pool
210 Loverna Detrital Pool
212 Morango Viking Gas Pool
242 Castue Lake Basal Mannville–Bakken Sand Pool
262 Plato North Viking Pool
263 Whitesides West Viking Sand Gas Pool
264 Druid Mannville Sands Pool
265 Buffalo Coulee North Bakken Sand Pool
268 Plover Lake Bakken Sand Pool
294 Cosine Lake Laydminster Sand Pool
298 Hearts Hill Bakken Sand Pool
300 Coleville South Bakken Sand Pool
301 Coleville South Mannville Sand Pool
302 Coleville Mannville Sand Pool
303 North Smiley Bakken Sand Pool
304 Lucaland Bakken Sand Pool
306 Court Bakken Sand Pool
307 Kerrobert Viking Sand Pool
325 Fergon Viking Sand Pool
326 Whitesides West Ribstone Creek Sand Gas Pool
337 Prairedale Viking Sand Pool
348 Driver Mannville Sand Gas Pool
349 Driver Bakken Sand Gas Pool
350 Loverna South Viking Gas Pool
351 Loverna South Bakken Sand Gas Pool
352 Loverna North Mannville Sand Gas Pool
355 Loverna West Bakken Sand Gas Pool
367 Verendrye Viking Sand Pool
379 Plenty Viking Sand Pool
380 Superb Bakken Sand Gas Pool


South Saskatchewan River
Bigstick Lake
Antelope Lake
Bitter Lake
Crane Lake
Cypress Lake
SWIFT CURRENT
MAPLE CREEK
SHAUNAVON
*EASTEND
*VAL MARIE
SASKATCHEWAN
U.S.A.
ALBERTA
SASKATCHEWAN
FOURTH MERIDIAN
WEST OF THE 3RD MERIDIAN
RGE 30 RGE 29 RGE 28 RGE 27 RGE 26 RGE 25 RGE 24 RGE 23 RGE 22 RGE 21 RGE 20 RGE 19 RGE 18 RGE 17 RGE 16 RGE 15 RGE 14 RGE 13 RGE 12
TWP 1 TWP 2 TWP 3 TWP 4 TWP 5 TWP 6 TWP 7 TWP 8 TWP 9 TWP 10 TWP 11 TWP 12 TWP 13 TWP 14 TWP 15 TWP 16 TWP 17 TWP 18 TWP 19 TWP 20 TWP 21

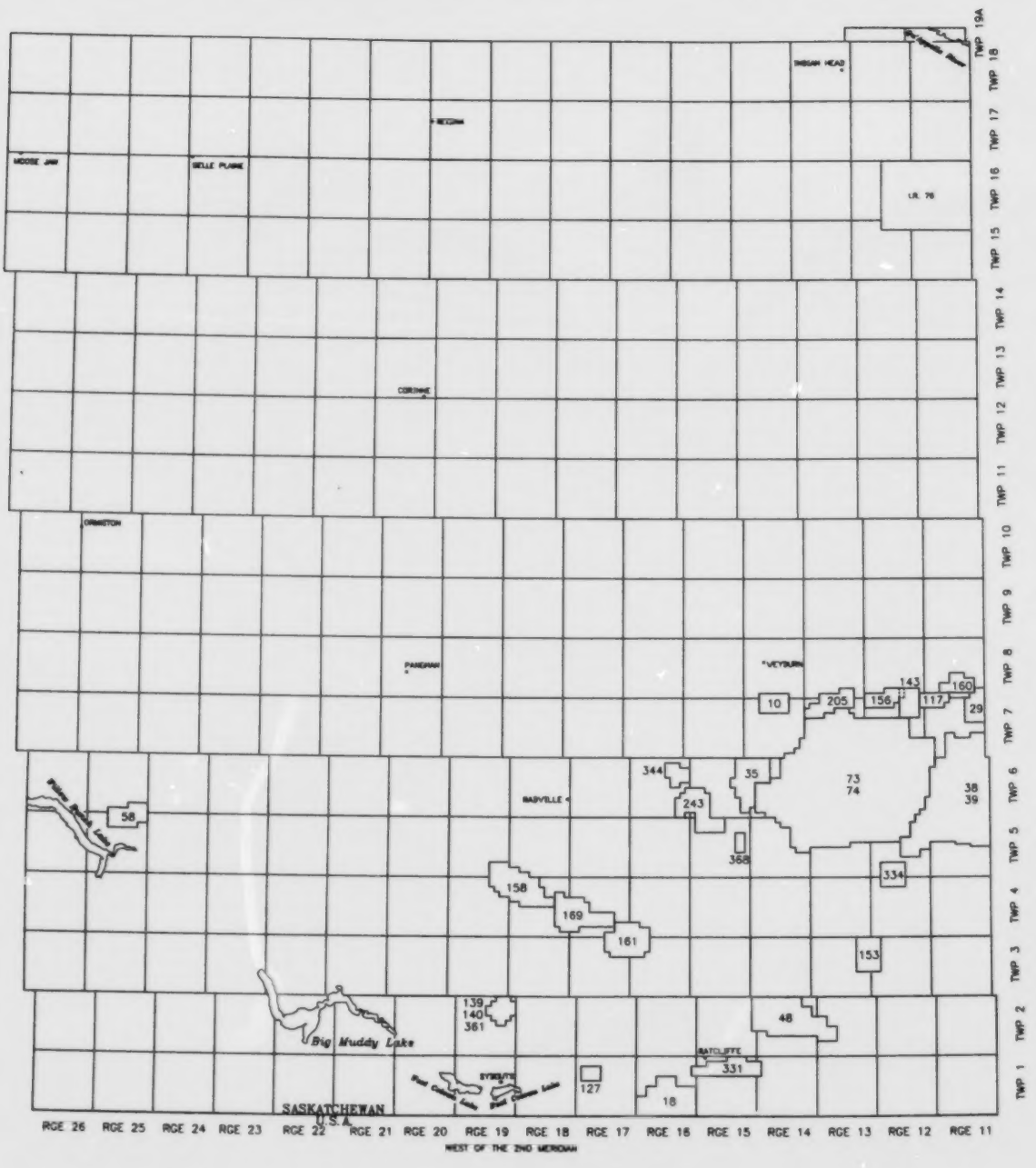
OIL & GAS POOLS – AREA III

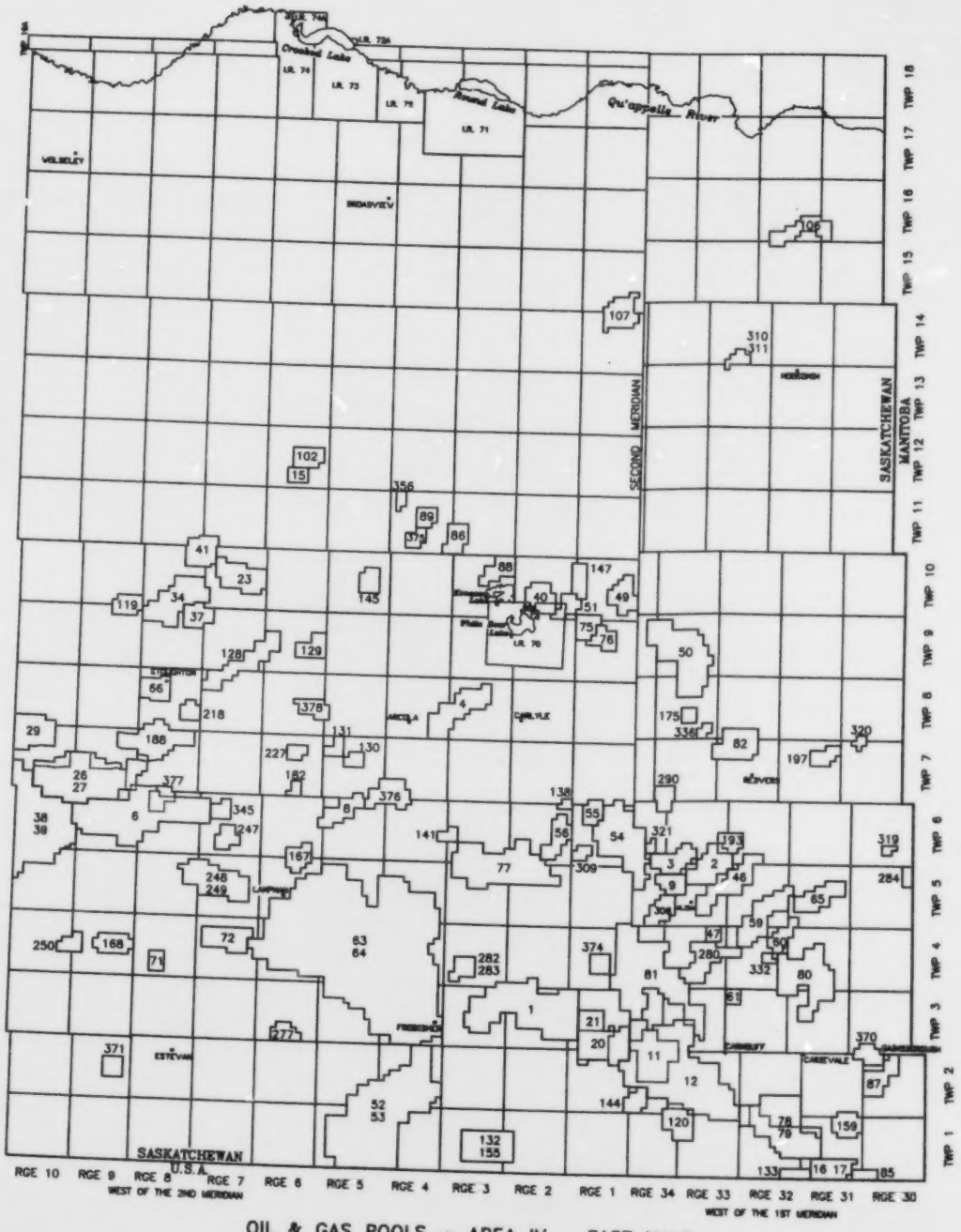
5 Bottrum Roseray Sand Pool
7 Bone Creek Upper Shaunavon Pool
13 Delia Upper Shaunavon Pool
14 Dollard Upper Shaunavon Pool
19 Fosterton Roseray Sand Pool
22 Gull Lake North Upper Shaunavon Pool
24 Hazlet Roseray Sand Pool
28 Herbrun Upper Shaunavon Pool
30 Instow Upper Shaunavon Pool
31 Johnston Upper Shaunavon Pool
32 Lafatchville Shaunavon Pool
33 Leon Lake Shaunavon Pool
36 Main Success Roseray Sand Pool
44 North Premier Roseray Sand Pool
45 North Premier Upper Shaunavon Pool
57 Ropden Upper Shaunavon Pool
62 South Success Roseray Sand Pool
67 Success Roseray Sand Alpha Pool
68 Suffield Upper Shaunavon Pool
69 Suffield Roseray Sand Pool
70 Verla Roseray Sand Pool

121 Covington Upper Shaunavon Pool
123 Eastbrook Upper Shaunavon Pool
124 Whitemud Shaunavon Pool
137 Gull Lake South Upper Shaunavon Pool
146 Gull Lake Central Upper Shaunavon Pool
148 Gull Lake Based Cantuar Sand Pool
149 Cantuar Main Cantuar Sand Pool
150 Cantuar Lower Roseray Sand Pool
151 Beverley Upper Roseray Sand Pool
152 Cantuar East Roseray Sand Pool
157 Buffa Upper Shaunavon Pool
162 Conaul Second White Specks Gas Pool
163 Conaul Upper Shaunavon Sand Gas Pool
164 Bench Upper Shaunavon Pool
165 Pennant Upper Shaunavon Pool
170 Cantuar East Cantuar Sand Pool
178 Ropden West Shaunavon Pool
180 Clintonville Shaunavon Pool

187 Beverley Cantuar Sand Pool
189 Gull Lake Cantuar Gas Pool
190 Covington West Upper Shaunavon Pool
191 Antelope Lake Upper Shaunavon Pool
200 Battle Creek Upper Shaunavon Pool
201 Battle Creek Madison Pool
214 Hatton Medicine Hat Sand Gas Pool
215 Hatton Milk River–Medicine Hat Gas Pool
216 Hatton Milk River Gas Pool
217 Liebenthal Milk River Gas Pool
219 Beverley North Cantuar Sand Pool
228 Beverley East Cantuar Gas Pool
236 Butte West Upper Shaunavon Pool
240 Eastend Shaunavon Pool
268 Success North Roseray Sand Pool
275 Antelope Lake East Roseray Sand Pool
278 Bottrum North Roseray Sand Pool
285 Bigstick Second White Specks Gas Pool

293 Java Cantuar Sand Pool
295 Burstall Milk River Gas Pool
296 Burstall Milk River–Medicine Hat Gas Pool
297 Burstall Medicine Hat Sand Gas Pool
305 Burstall North Viking Sand Gas Pool
323 Fosterton South Cantuar Sand Pool
324 Fosterton South Roseray Sand Pool
327 Senate Second White Specks Gas Pool
333 Cantuar North Roseray Sand Pool
335 Beverley East Cantuar Sand Pool
338 Chambery Upper Shaunavon Pool
340 Hatuleu Upper Shaunavon Pool
357 Dollard Lower Shaunavon Pool
358 Freeflight Milk River Gas Pool
359 Battle Creek South Upper Shaunavon Pool
364 Ingebright Milk River Gas Pool
369 Crane Lake Milk River Gas Pool
372 Crane Lake South Milk River Gas Pool
373 Crane Lake South Second White Specks Gas Pool
381 Bottrum East Roseray Sand Pool
382 Wheat Valley Cantuar Sand Gas Pool


INDIAN HEAD
MOOSE JAW
REGINA
QU'APPELLE
CORINNE
ORMISTON
PANGMAN
WEYBURN
RADVILLE
BIG MUDDY LAKE
BIG MUDDY LAKE
BIG MUDDY LAK


Crooked Lake
Round Lake
Qu'appelle River
VELSEDEY
INDIAVIEW
ESTEVAN
CARNDUFF
CARLYLE
SECOND MERIDIAN
SASKATCHEWAN
MANITOBA
SASKATCHEWAN
U.S.A.
RGE 10 RGE 9 RGE 8 RGE 7 RGE 6 RGE 5 RGE 4 RGE 3 RGE 2 RGE 1 RGE 34 RGE 33 RGE 32 RGE 31 RGE 30
WEST OF THE 2ND MERIDIAN
WEST OF THE 1ST MERIDIAN
TWP 18 TWP 17 TWP 16 TWP 15 TWP 14 TWP 13 TWP 12 TWP 11 TWP 10 TWP 9 TWP 8 TWP 7 TWP 6 TWP 5 TWP 4 TWP 3 TWP 2 TWP 1

OIL & GAS POOLS – AREA IV – EAST HALF

1 Alameda Midale Beds Pool
2 Alida East Frobisher–Alida Beds Pool
3 Alida West Frobisher–Alida Beds Pool
4 Arcola Frobisher–Alida Beds Pool
6 Benson Midale Beds Pool
8 Browning Frobisher–Alida Beds Pool
9 Cantal Frobisher–Alida Beds Pool
11 Carnduff Frobisher Beds Pool
12 Carnduff Midale Beds Pool
15 Moose Valley South Tilston Beds Pool
16 Elmore Frobisher Beds Pool
17 Elmore Midale Beds Pool
20 Glen Ewen Frobisher Beds Pool
21 Glen Ewen Midale Beds Pool
23 Handsworth Alida Beds Pool
26 Huntoon Midale Beds Pool
27 Huntoon Frobisher Beds Pool
29 Innes Frobisher Beds Pool
34 Last Horse Hill Frobisher–Alida Beds Pool
37 Melrose Frobisher–Alida Beds Pool
38 Midale Central Frobisher Beds Pool
39 Midale Central Midale Beds Pool
40 Moose Mountain Tilston Beds Pool
41 North Handsworth Alida Beds Pool
46 Nottingham Alida Beds Pool
47 Oakley Frobisher Beds Pool
48 Parkman Souris Valley Beds Pool
50 Parkman Tilston–Souris Valley Beds Pool
51 Parkman Tilston Beds Pool
52 Pinto Frobisher Beds Pool
53 Pinto Midale Beds Pool
54 Queensdale East Frobisher–Alida Beds Pool
55 Queensdale North Alida Beds Pool
56 Queensdale West Alida Beds Pool
58 Rosebank Alida Beds Pool
60 Rosebank South Alida Beds Pool
61 Silverton Frobisher Beds Pool
63 Steelman Frobisher Beds Pool
64 Steelman Midale Beds Pool
65 Starthcona Alida–Tilston Beds Pool
66 Staughton Frobisher–Alida Beds Pool
71 View Hill Midale Beds Pool
72 West Kingsford Midale Beds Pool
75 White Bear Tilston Beds Pool
76 White Bear Tilston–Souris Valley Beds Pool
77 Wilmer Frobisher–Alida Beds Pool
78 Wortsman Frobisher Beds Pool
79 Wortsman Midale Beds Pool
80 Ingoldsby Frobisher–Alida Beds Pool
81 Hastings Frobisher Beds Pool
82 Lightning Tilston Beds Pool
85 North Antler Midale Beds Pool
86 South Flatrock Tilston Beds Pool
87 Gainsborough Frobisher–Alida Beds Pool
88 Kenesee Tilston Beds Pool
89 Hazelwood Tilston Beds Pool
102 Moose Valley Tilston Beds Pool
106 Roseville Belden Sand Pool
107 Wapella Sand Pool
119 Hartavon Frobisher–Alida Beds Pool
120 Souris Flat Frobisher Beds Pool
128 Freestone Frobisher–Alida Beds Pool
129 Star Valley Frobisher–Alida Beds Pool
130 Claribre Frobisher–Alida Beds Pool
131 Claribre West Frobisher–Alida Beds Pool
132 Northgate Frobisher Beds Pool
133 Sherwood Frobisher Beds Pool
138 Wilkwood Alida Beds Pool
141 Dalesboro Frobisher–Alida Beds Pool
144 Florence Frobisher Beds Pool
148 Wormley Alida Beds Pool
147 Crystal Hill Souris Valley Beds Pool
155 Northgate Midale Beds Pool
159 Wirmore Frobisher Beds Pool
167 Weir Hill Frobisher Beds Pool
168 Macoun Midale Beds Pool
175 Parkman South Tilston–Souris Valley Beds Pool
182 Morrisview Frobisher–Alida Beds Pool
188 Woolfield Frobisher Beds Pool
193 Edgevale Tilston Beds Pool
197 Frye Tilston–Souris Valley Beds Pool
218 Staughton South Frobisher Beds Pool
227 Kisbey Birdbear Pool
247 Minard Midale Beds Pool
248 Bryant Midale Beds Pool
249 Bryant Frobisher Beds Pool
250 Macoun West Midale Beds Pool
277 Glenlalt Midale Beds Pool
280 Hastings East Frobisher Beds Pool
282 Alameda West Midale Beds Pool
283 Alameda West Frobisher Beds Pool
284 Fertile Tilston Beds Pool
290 Waubope Alida–Tilston Beds Pool
309 Cantal South Frobisher Beds Pool
309 Auburnton Frobisher–Alida Beds Pool
310 Red Jacket Shaunavon–Gravelbourg Pool
311 Red Jacket Gravelbourg Pool
319 Fertile Tilston–Souris Valley Beds Pool
320 Frye East Tilston–Souris Valley Beds Pool
321 Alida North Alida Beds Pool
332 Ingoldsby West Frobisher–Alida Beds Pool
336 Waubope North Tilston Beds Pool
345 Benson East Midale Beds Pool
356 Hazelwood West Tilston Beds Pool
370 Gainsborough North Frobisher–Alida Beds Pool
371 Tableland Winnipegosis Pool
374 Hastings West Frobisher Beds Pool
375 Hazelwood South Tilston Beds Pool
376 Wordsworth Frobisher–Alida Beds Pool
377 Benson Frobisher Beds Pool
378 Kisbey Frobisher–Alida Beds Pool

RESERVOIR DATA

RESERVES AND

PRODUCTION – OIL

FIVE YEAR OIL SUMMARY

	1985	1986	1987	1988	1989
INITIAL ESTABLISHED RESERVES (Million Cubic Metres)					
Area I - Heavy	65.070	64.449	65.926	68.419	73.885
Area II - Heavy	19.077	19.334	20.930	26.104	26.662
Area II - Light	23.730	27.713	26.912	27.577	25.958
Area III - Medium	93.096	95.454	98.344	105.913	107.658
Area IV - Medium	103.600	106.070	109.997	110.352	110.981
Area IV - Light	130.043	133.089	137.877	141.076	144.485
PROVINCIAL TOTAL	434.617	446.109	459.986	479.441	489.709
REMAINING ESTABLISHED RESERVES (Million Cubic Metres)					
Area I - Heavy	28.074	24.491	23.091	22.782	25.830
Area II - Heavy	8.180	7.668	8.434	12.731	12.450
Area II - Light	9.137	11.906	10.063	9.660	7.120
Area III - Medium	15.205	15.804	16.797	22.387	22.148
Area IV - Medium	24.186	24.441	27.061	25.033	23.716
Area IV - Light	27.144	27.419	28.088	28.127	27.999
PROVINCIAL TOTAL	111.926	111.729	113.532	120.700	119.263
YEARLY PRODUCTION (Million Cubic Metres)					
Area I - Heavy	3.063	2.956	2.865	2.826	2.571
Area II - Heavy	0.771	0.766	0.829	0.855	0.850
Area II - Light	1.218	1.208	1.035	1.080	0.920
Area III - Medium	1.781	1.757	1.886	1.978	1.992
Area IV - Medium	2.047	2.140	2.463	2.454	2.380
Area IV - Light	2.703	2.842	2.944	3.069	2.989
PROVINCIAL TOTAL	11.583	11.669	12.034	12.242	11.702
NUMBER OF PRODUCING WELLS					
Area I - Heavy	4 098	3 874	3 659	3 642	3 200
Area II - Heavy	892	844	811	836	782
Area II - Light	3 750	3 888	4 015	4 232	4 206
Area III - Medium	1 279	1 263	1 267	1 324	1 291
Area IV - Medium	2 240	2 354	2 393	2 462	2 433
Area IV - Light	3 179	3 278	3 308	3 477	3 401
PROVINCIAL TOTAL	15 438	15 501	15 453	15 973	15 292
AVERAGE DECEMBER PRODUCTION (Cubic Metres Per Day)					
Area I - Heavy	9 225	8 086	8 323	7 409	6 858
Area II - Heavy	2 073	2 167	2 324	2 319	2 378
Area II - Light	3 652	3 025	2 932	2 852	2 299
Area III - Medium	4 751	5 402	5 373	5 535	5 540
Area IV - Medium	4 706	6 059	6 086	6 631	6 411
Area IV - Light	7 426	8 085	8 326	8 177	8 216
PROVINCIAL TOTAL	31 833	32 784	33 374	32 723	31 702

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1990 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
AREA I - HEAVY											
ABERFELDY	G.P. SAND	0.208	0.00	15.00	15.00	0.000	0.031	0.031	0.023	0.008	7.801
	SPARKY SAND (UNIT)	55.702	8.00	1.70	9.70	4.456	0.947	5.403	5.344	0.059	17.117
	SPARKY SAND (S. ABFDY SPKY VOL UNIT)	23.605	6.10	1.00	7.10	1.440	0.236	1.676	1.541	0.135	20.998
	SPARKY SAND (NON-UNIT)	13.602	3.60	0.00	3.60	0.490	0.000	0.490	0.378	0.112	17.895
BALDWINTON	SPARKY SAND	1.323	5.40	0.00	5.40	0.071	0.000	0.071	0.062	0.009	3.305
BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)	9.860	5.70	2.10	7.80	0.562	0.207	0.769	0.811	0.057	8.331
	WASECA SAND (VOLUNTARY UNIT NO. 1)	3.693	1.80	0.90	2.70	0.066	0.033	0.099			
	MCLAREN SAND (NON-UNIT)	1.043	3.00	0.00	3.00	0.031	0.000	0.031	0.030	0.001	0.243
	WASECA SAND (NON-UNIT)	0.351	5.40	0.00	5.40	0.019	0.000	0.019	0.014	0.005	0.778
BIG GULLY NORTH	LLOYDMINSTER SAND	2.183	1.20	0.00	1.20	0.026	0.000	0.026	0.022	0.004	0.921
BUZZARD	LLOYDMINSTER SAND	4.299	6.20	0.00	6.20	0.267	0.000	0.267	0.165	0.102	16.601
CELTIC	G.P. SAND	21.822	10.70	1.00	11.70	2.335	0.218	2.553	0.640		112.896
	SPARKY SAND	25.950	3.30	0.00	3.30	0.856	0.000	0.856	0.245	3.534	33.254
	WASECA SAND	57.974	2.40	0.70	3.10	1.391	0.406	1.797	0.740		96.302
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.047		9.847
DEE VALLEY	WASECA SAND	16.387	6.70	0.00	6.70	1.098	0.000	1.098	0.452	0.646	34.008
DEE VALLEY EAST	SPARKY SAND	7.871	1.10	0.00	1.10	0.087	0.000	0.087	0.034		2.240
	WASECA SAND	8.376	3.60	0.00	3.60	0.302	0.000	0.302	0.084	0.250	9.065
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.021		3.589
DULWICH	SPARKY SAND	14.078	8.00	4.10	12.10	1.126	0.577	1.703	1.697	0.006	9.214
DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)	1.341	4.50	11.60	16.10	0.060	0.156	0.216	0.212	0.004	0.673
	SPARKY SAND (NON-UNIT)	0.585	0.50	0.00	0.50	0.003	0.000	0.003	0.002	0.001	0.340
EAR LAKE	WASECA SAND	1.143	7.30	0.00	7.30	0.083	0.000	0.083	0.042	0.041	5.809
EDAM	WASECA SAND	5.427	1.40	0.00	1.40	0.076	0.000	0.076	0.038	0.038	0.587
EDAM NORTH	WASECA SAND	3.743	7.90	0.00	7.90	0.296	0.000	0.296	0.104	0.192	25.838
EDAM WEST	SPARKY/G.P. SAND	24.074	5.60	0.00	5.60	1.348	0.000	1.348	0.471		89.325
	WASECA SAND	18.697	7.50	0.00	7.50	1.402	0.000	1.402	0.434	1.721	108.714
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.124		26.532
EPPING	G.P. SAND (S. EPPING UNIT)	4.310	3.00	7.10	10.10	0.129	0.306	0.435	2.627	0.224	32.490
	SPARKY SAND (S. EPPING UNIT)	23.924	5.00	5.10	10.10	1.196	1.220	2.416			
	SPARKY SAND (SW EPPING VOL UNIT 1)	10.775	5.40	4.30	9.70	0.582	0.463	1.045	0.931	0.114	18.869
	G.P. SAND (NON-UNIT)	19.541	2.50	0.00	2.50	0.488	0.000	0.488	0.422	0.067	11.470
	SPARKY SAND (NON-UNIT)	38.130	5.10	0.00	5.10	1.945	0.000	1.945	1.713	0.232	38.949
EPPING SOUTH	SPARKY SAND	9.864	1.70	0.00	1.70	0.168	0.000	0.168	0.112	0.056	9.465
EVESHAM	SPARKY SAND	2.488	6.40	0.00	6.40	0.158	0.000	0.158	0.081	0.077	10.655
EVESHAM NORTH	MCLAREN SAND	0.982	3.20	0.40	3.60	0.031	0.004	0.035	0.019	0.016	4.303
	SPARKY SAND	1.332	11.00	0.00	11.00	0.147	0.000	0.147	0.082	0.065	10.243
EYEHILL	CUMMINGS SAND	10.228	1.00	3.56	4.56	0.102	0.364	0.466	0.220	0.246	26.184
FOREST BANK	SPARKY SAND	10.194	3.45	0.00	3.45	0.352	0.000	0.352	0.174		5.848
	WASECA SAND	7.272	5.18	0.00	5.18	0.377	0.000	0.377	0.183	0.290	9.385
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.082		4.758
FREEMONT	SPARKY SAND	2.345	9.90	0.00	9.90	0.232	0.000	0.232	0.134	0.098	12.608
	WASECA SAND	3.353	6.05	0.00	6.05	0.203	0.000	0.203	0.177	0.026	6.130
FURNESS	SPARKY SAND	11.305	5.00	0.00	5.00	0.565	0.000	0.565	0.452	0.113	13.259
GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)	11.403	4.20	0.70	4.90	0.479	0.080	0.559	1.855	0.187	35.293
	WASECA SAND (GOLDEN LAKE VOL UNIT)	13.950	7.60	1.80	9.20	1.060	0.223	1.283			
	SPARKY SAND (NON-UNIT)	7.426	3.56	0.00	3.56	0.264	0.000	0.264	0.175		13.318
	WASECA SAND (NON-UNIT)	5.723	6.71	0.00	6.71	0.384	0.000	0.384	0.344	0.089	6.163
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.040		4.064
GOLDEN LAKE SOUTH	SPARKY SAND	30.401	2.41	1.62	4.03	0.733	0.492	1.225	0.715		12.554
	WASECA SAND	30.044	11.40	0.16	11.56	3.425	0.048	3.473	1.806	2.072	82.302
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.105		7.184
GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)	10.986	7.00	4.40	11.40	0.769	0.483	1.252	0.872	0.380	36.931
	WASECA SAND (NON-UNIT)	16.230	8.26	0.00	8.26	1.344	0.000	1.344	0.912	0.432	53.052

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
									AREA I - HEAVY	
24	4.27	27.6	25.0	1.020	968	537	CRETACEOUS	1981	ABERFELDY	G.P. SAND
4209	4.42	35.0	13.0	1.017	968	535	CRETACEOUS	1956		SPARKY SAND (UNIT)
1522	5.18	35.0	13.0	1.017	–	535	CRETACEOUS	1956		SPARKY SAND (S. ABFDY SPKY VOL UNIT)
826	5.50	35.0	13.0	1.017	–	535	CRETACEOUS	1956		SPARKY SAND (NON-UNIT)
210	4.00	25.0	30.0	1.111	970	500	CRETACEOUS	1969	BALDWINTON	SPARKY SAND
1101	2.99	36.0	15.3	1.018	965	496	CRETACEOUS	1962	BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)
518	2.38	36.0	15.3	1.018	965	479	CRETACEOUS	1962		WASECA SAND (VOLUNTARY UNIT NO. 1)
97	3.59	36.0	15.3	1.018	981	496	CRETACEOUS	1962		MCLAREN SAND (NON-UNIT)
16	7.32	36.0	15.3	1.018	972	479	CRETACEOUS	1962		WASECA SAND (NON-UNIT)
162	5.56	35.0	30.0	1.020	975	542	CRETACEOUS	1973	BIG GULLY NORTH	LLOYDMINSTER SAND
664	4.11	25.0	30.0	1.111	971	579	CRETACEOUS	1978	BUZZARD	LLOYDMINSTER SAND
1462	6.28	35.0	31.0	1.030	969	477	CRETACEOUS	1968	CELTIC	G.P. SAND
1775	5.54	35.0	24.0	1.008	975	463	CRETACEOUS	1968		SPARKY SAND
2753	7.98	35.0	24.0	1.008	968	451	CRETACEOUS	1968		WASECA SAND
0	0.00	0.0	0.0	1.008	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1481	3.82	35.0	16.0	1.015	976	480	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
612	4.44	35.0	16.0	1.015	969	490	CRETACEOUS	1968	DEE VALLEY EAST	SPARKY SAND
765	3.78	35.0	16.0	1.015	971	484	CRETACEOUS	1970		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1748	3.11	34.0	15.0	1.116	962	556	CRETACEOUS	1948	DULWICH	SPARKY SAND
113	3.96	35.0	13.0	1.016	957	551	CRETACEOUS	1954	DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)
32	6.10	35.0	13.0	1.016	957	551	CRETACEOUS	1954		SPARKY SAND (NON-UNIT)
178	2.91	35.0	30.0	1.110	977	656	CRETACEOUS	1979	EAR LAKE	WASECA SAND
553	6.23	25.0	30.0	1.111	988	431	CRETACEOUS	1972	EDAM	WASECA SAND
432	5.50	25.0	30.0	1.111	988	444	CRETACEOUS	1980	EDAM NORTH	WASECA SAND
1473	8.07	30.0	25.0	1.111	973	467	CRETACEOUS	1982	EDAM WEST	SPARKY/G.P. SAND
1716	5.38	30.0	25.0	1.111	978	447	CRETACEOUS	1982		WASECA SAND
0	0.00	0.0	0.0	1.111	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1473	1.04	35.0	18.0	1.020	982	583	CRETACEOUS	1951	EPPING	G.P. SAND (S. EPPING UNIT)
1651	5.15	35.0	18.0	1.020	984	583	CRETACEOUS	1951		SPARKY SAND (S. EPPING UNIT)
923	4.15	35.0	18.0	1.020	984	583	CRETACEOUS	1951		SPARKY SAND (SW EPPING VOL UNIT 1)
2315	3.00	35.0	18.0	1.020	982	583	CRETACEOUS	1951		G.P. SAND (NON-UNIT)
2946	4.60	35.0	18.0	1.020	968	563	CRETACEOUS	1951		SPARKY SAND (NON-UNIT)
1213	2.89	35.0	18.0	1.020	970	563	CRETACEOUS	1951	EPPING SOUTH	SPARKY SAND
340	2.78	35.0	23.0	1.033	958	715	CRETACEOUS	1969	EVESHAM	SPARKY SAND
146	2.89	35.0	30.0	1.053	989	686	CRETACEOUS	1982	EVESHAM NORTH	MCLAREN SAND
227	2.25	35.0	23.0	1.033	951	734	CRETACEOUS	1976		SPARKY SAND
376	9.82	34.0	16.0	1.031	970	746	CRETACEOUS	1971	EYEHILL	CUMMINGS SAND
832	4.23	35.0	16.0	1.015	982	526	CRETACEOUS	1961	FOREST BANK	SPARKY SAND
851	2.95	35.0	16.0	1.015	979	507	CRETACEOUS	1963		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
291	3.03	35.0	20.0	1.053	963	638	CRETACEOUS	1976	FREEMONT	SPARKY SAND
372	3.39	35.0	20.0	1.053	958	620	CRETACEOUS	1976		WASECA SAND
745	5.34	34.0	15.0	1.017	967	566	CRETACEOUS	1970	FURNESS	SPARKY SAND
1188	3.43	35.0	20.0	1.009	977	506	CRETACEOUS	1964	GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)
1198	4.02	35.0	16.0	1.015	984	481	CRETACEOUS	1964		WASECA SAND (GOLDEN LAKE VOL UNIT)
664	4.03	35.0	20.0	1.009	970	506	CRETACEOUS	1964		SPARKY SAND (NON-UNIT)
534	3.70	35.0	16.0	1.015	983	481	CRETACEOUS	1964		WASECA SAND (NON-UNIT)
0	0.00	0.0	0.0	1.009	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1612	6.65	35.0	18.0	1.012	978	490	CRETACEOUS	1964	GOLDEN LAKE SOUTH	SPARKY SAND
2834	3.66	35.0	16.0	1.015	986	473	CRETACEOUS	1964		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
874	4.33	35.7	16.0	1.033	963	472	CRETACEOUS	1949	GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)
1182	4.73	35.7	16.0	1.033	969	472	CRETACEOUS	1949		WASECA SAND (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
HILLMOND	G.P. SAND	2.165	0.30	0.00	0.30	0.006	0.000	0.006	0.006	0.000	0.326
	SPARKY SAND	2.301	1.74	0.00	1.74	0.040	0.000	0.040	0.020	0.020	4.747
LANDROSE	MCLAREN SAND	3.239	4.01	0.00	4.01	0.130	0.000	0.130	0.127	0.003	1.471
	WASECA SAND	2.589	4.67	0.00	4.67	0.121	0.000	0.121	0.119	0.002	1.234
LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)	18.059	3.60	3.50	7.10	0.650	0.632	1.282	0.949	0.333	33.473
	WASECA SAND (NON-UNIT)	9.026	2.36	0.00	2.36	0.213	0.000	0.213	0.167	0.046	9.383
LASHBURN SOUTH	SPARKY SAND	1.196	3.26	0.00	3.26	0.039	0.000	0.039	0.032	0.007	1.621
	WASECA SAND	7.385	5.96	0.00	5.96	0.440	0.000	0.440	0.251	0.189	24.648
LASHBURN WEST	SPARKY SAND	5.306	2.14	0.00	2.14	0.114	0.000	0.114	0.048	0.066	1.932
LLOYDMINSTER	SPARKY SAND	4.125	4.39	0.00	4.22	0.181	0.000	0.181	0.168	0.013	5.504
LONE ROCK	SPARKY SAND	13.732	8.60	2.10	10.70	1.181	0.288	1.469	1.381	0.088	21.873
LOW LAKE	WASECA SAND	1.320	7.00	0.00	7.00	0.092	0.000	0.092	0.072	0.020	4.871
MACKLIN	SPARKY SAND	8.525	5.70	2.27	7.97	0.486	0.194	0.680	0.411	0.269	18.914
MAIDSTONE	MCLAREN SAND	7.317	6.76	0.00	6.76	0.495	0.000	0.495	0.225	0.270	18.148
	WASECA SAND	1.521	4.14	0.00	4.14	0.063	0.000	0.063	0.045	0.018	2.558
MANITO LAKE	SPARKY SAND	8.644	8.73	0.00	8.73	0.755	0.000	0.755	0.316	0.439	38.093
MARSDEN	SPARKY SAND	1.969	5.80	0.00	5.80	0.114	0.000	0.114	0.110	0.004	0.523
MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)	10.830	4.60	25.80	30.40	0.498	2.794	3.292	0.576	2.716	107.717
	SPARKY SAND (VOL UNIT NO. 2)	3.876	7.20	18.10	25.30	0.279	0.702	0.981	0.157	0.824	33.298
	SPARKY SAND (NON-UNIT)	3.139	6.60	0.00	6.60	0.207	0.000	0.207	0.068	0.139	16.860
NEILBURG	MCLAREN SAND	9.796	11.24	0.00	11.24	1.101	0.000	1.101	0.534	0.567	77.476
NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)	10.939	3.50	3.98	7.48	0.383	0.435	0.818	0.794	0.024	6.753
	SPARKY SAND (NON-UNIT)	7.451	1.84	0.32	2.16	0.137	0.024	0.161	0.129	0.032	7.262
NORTHMINSTER NORTH	G.P. SAND	0.858	1.60	0.00	1.60	0.014	0.000	0.014	0.013	0.001	0.517
	SPARKY SAND	5.249	9.57	0.00	9.57	0.502	0.000	0.502	0.119	0.383	23.043
PIKES PEAK	G.P. SAND	2.776	9.10	0.00	9.10	0.253	0.000	0.253	0.223	0.030	4.084
	SPARKY SAND	2.286	0.70	0.00	0.70	0.016	0.000	0.016	0.011	0.005	0.543
	WASECA SAND	17.017	1.73	12.95	14.68	0.294	2.204	2.498	1.904	0.594	219.684
RUSH LAKE	SPARKY SAND	9.660	5.20	0.00	5.20	0.502	0.000	0.502	0.120		15.002
	WASECA SAND	6.090	6.92	0.00	6.92	0.421	0.000	0.421	0.078	0.674	13.120
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.051		14.476 *
SALT LAKE	LLOYDMINSTER SAND	9.355	9.50	7.28	16.78	0.889	0.681	1.570	0.347	1.223	44.663
SENLAC	LLOYDMINSTER SAND	11.901	5.20	1.00	6.20	0.619	0.119	0.738	0.572	0.166	36.391
SILVERDALE	SPARKY SAND	20.075	6.20	0.90	7.10	1.245	0.181	1.426	1.346	0.080	23.919
STANDARD HILL	WASECA SAND	20.892	7.50	0.00	7.50	1.567	0.000	1.567	1.194	0.373	55.083
TANGLEFLAGS	LLOYDMINSTER SAND (VOL UNIT NO. 2)	4.001	5.50	3.80	9.30	0.220	0.152	0.372	0.279	0.093	14.968
	G.P. SAND (VOL UNIT NO. 3)	4.857	6.75	0.00	6.75	0.328	0.000	0.328	0.184	0.144	18.963
	LLOYDMINSTER SAND (VOL UNIT NO. 3)	5.743	4.30	0.00	4.30	0.247	0.000	0.247	0.216	0.031	10.326
	MCLAREN SAND (VOL UNIT NO. 3)	0.212	3.80	0.00	3.80	0.008	0.000	0.008	0.008	0.000	0.000
	SPARKY SAND (VOL UNIT NO. 3)	4.857	0.76	0.00	0.76	0.037	0.000	0.037	0.030	0.007	1.165
	G.P. SAND (NON-UNIT)	46.078	5.37	0.25	5.62	2.474	0.115	2.589	1.590		51.674
	LLOYDMINSTER SAND (NON-UNIT)	42.648	4.25	0.00	4.25	1.813	0.000	1.813	1.007		49.168
	MCLAREN SAND (NON-UNIT)	4.851	3.97	0.00	3.97	0.193	0.000	0.193	0.074	1.965	4.441
	SPARKY SAND (NON-UNIT)	12.327	5.72	0.00	5.72	0.705	0.000	0.705	0.298		19.722
	MANNVILLE SD (COMMINGLED) (NON-UNIT)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.366		35.575
TANGLEFLAGS EAST	MCLAREN SAND	1.462	7.05	0.00	7.05	0.103	0.000	0.103	0.075	0.028	4.200
TANGLEFLAGS NORTH	G.P. SAND	1.651	1.51	0.00	1.51	0.025	0.000	0.025	0.018	0.007	1.882
	LLOYDMINSTER/CUMMINGS SAND	25.262	3.00	0.94	3.94	0.758	0.237	0.995	0.503	0.492	82.951
TANGLEFLAGS WEST	G.P. SAND	4.360	1.19	0.00	1.19	0.052	0.000	0.052	0.041		2.144
	LLOYDMINSTER SAND	4.034	3.27	0.00	3.27	0.132	0.000	0.132	0.107		7.993
	MCLAREN SAND	2.488	4.06	0.00	4.06	0.101	0.000	0.101	0.054	0.133	8.151
	SPARKY SAND	4.370	4.81	0.00	4.81	0.210	0.000	0.210	0.155		8.753
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.005		1.422
WESTHAZEL	G.P. SAND	6.709	2.06	0.00	2.06	0.138	0.000	0.138	0.111	0.027	8.782
	SPARKY SAND	7.251	4.51	0.00	4.51	0.327	0.000	0.327	0.190	0.137	21.758
WINTER	CUMMINGS SAND	7.911	1.66	0.00	1.66	0.131	0.000	0.131	0.042	0.089	12.895

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
243	3.71	35.0	30.0	1.020	970	507	CRETACEOUS	1977	HILLMOND	G.P. SAND
340	2.84	35.0	30.0	1.028	970	494	CRETACEOUS	1977		SPARKY SAND
340	4.18	30.0	20.0	1.053	981	513	CRETACEOUS	1950	LANDROSE	MCLAREN SAND
243	3.67	38.0	18.0	1.017	983	521	CRETACEOUS	1950		WASECA SAND
1263	6.22	30.0	21.0	1.031	962	518	CRETACEOUS	1960	LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)
631	4.89	35.0	15.0	1.017	963	518	CRETACEOUS	1960		WASECA SAND (NON-UNIT)
194	2.24	35.0	20.0	1.017	983	534	CRETACEOUS	1987	LASHBURN SOUTH	SPARKY SAND
550	4.59	35.0	15.0	1.017	979	524	CRETACEOUS	1971		WASECA SAND
742	4.54	25.0	30.0	1.111	991	537	CRETACEOUS	1979	LASHBURN WEST	SPARKY SAND
243	5.67	35.0	13.0	1.017	965	556	CRETACEOUS	1952	LLOYDMINSTER	SPARKY SAND
939	5.49	33.0	15.0	1.053	980	572	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
146	3.65	36.0	30.0	1.017	971	509	CRETACEOUS	1950	LOW LAKE	WASECA SAND
1197	2.73	35.0	23.0	1.033	947	712	CRETACEOUS	1976	MACKLIN	SPARKY SAND
1753	2.65	25.0	30.0	1.111	963	500	CRETACEOUS	1978	MAIDSTONE	MCLAREN SAND
340	2.84	25.0	30.0	1.111	973	503	CRETACEOUS	1981		WASECA SAND
1355	4.05	25.0	30.0	1.111	965	605	CRETACEOUS	1970	MANITO LAKE	SPARKY SAND
162	4.57	35.0	20.0	1.053	982	606	CRETACEOUS	1949	MARSDEN	SPARKY SAND
518	9.58	30.0	25.0	1.031	946	625	CRETACEOUS	1979	MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)
320	5.55	30.0	25.0	1.031	946	625	CRETACEOUS	1979		SPARKY SAND (VOL UNIT NO. 2)
308	4.67	30.0	25.0	1.031	946	625	CRETACEOUS	1979		SPARKY SAND (NON-UNIT)
1312	3.95	30.0	30.0	1.111	964	570	CRETACEOUS	1978	NEILBURG	MCLAREN SAND
987	3.90	34.0	15.0	1.017	976	541	CRETACEOUS	1959	NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)
437	6.00	34.0	15.0	1.017	967	541	CRETACEOUS	1959		SPARKY SAND (NON-UNIT)
130	4.19	25.0	30.0	1.111	984	543	CRETACEOUS	1961	NORTHMINSTER NORTH	G.P. SAND
734	4.54	25.0	30.0	1.111	970	524	CRETACEOUS	1981		SPARKY SAND
291	4.10	35.0	30.0	1.053	970	530	CRETACEOUS	1970	PIKES PEAK	G.P. SAND
599	1.64	35.0	30.0	1.053	984	515	CRETACEOUS	1973		SPARKY SAND
728	8.50	33.0	15.0	1.020	978	497	CRETACEOUS	1970		WASECA SAND
1249	4.91	25.0	30.0	1.111	978	478	CRETACEOUS	1971	RUSH LAKE	SPARKY SAND
950	4.07	25.0	30.0	1.111	977	450	CRETACEOUS	1971		WASECA SAND
0	0.00	0.0	0.0	1.111	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
955	4.50	28.0	20.0	1.029	970	737	CRETACEOUS	1985	SALT LAKE	LLOYDMINSTER SAND
1462	4.75	28.0	32.0	1.111	968	787	CRETACEOUS	1980	SENLAC	LLOYDMINSTER SAND
2056	3.78	34.0	20.0	1.053	965	564	CRETACEOUS	1968	SILVERDALE	SPARKY SAND
2074	3.58	34.0	16.0	1.015	968	472	CRETACEOUS	1963	STANDARD HILL	WASECA SAND
421	4.09	30.0	21.0	1.020	959	532	CRETACEOUS	1965	TANGLEFLAGS	LLOYDMINSTER SAND (VOL UNIT NO. 2)
567	3.20	33.3	18.0	1.020	969	490	CRETACEOUS	1971	"	G.P. SAND (VOL UNIT NO. 3)
833	3.36	30.6	31.6	1.020	960	532	CRETACEOUS	1965		LLOYDMINSTER SAND (VOL UNIT NO. 3)
32	2.85	35.0	30.0	1.053	970	443	CRETACEOUS	1965		MCLAREN SAND (VOL UNIT NO. 3)
627	3.25	35.0	30.0	1.028	970	511	CRETACEOUS	1969		SPARKY SAND (VOL UNIT NO. 3)
3102	5.55	35.0	22.0	1.020	970	492	CRETACEOUS	1971		G.P. SAND (NON-UNIT)
4361	3.80	35.0	25.0	1.020	962	532	CRETACEOUS	1965		LLOYDMINSTER SAND (NON-UNIT)
695	3.00	35.0	30.0	1.053	970	443	CRETACEOUS	1965		MCLAREN SAND (NON-UNIT)
1482	3.49	35.0	30.0	1.028	969	511	CRETACEOUS	1969		SPARKY SAND (NON-UNIT)
0	0.00	0.0	0.0	1.020	–	–	CRETACEOUS	–		MANNVILLE SD (COMMINGLED) (NON-UNIT)
210	4.42	25.0	30.0	1.111	973	359	CRETACEOUS	1978	TANGLEFLAGS EAST	MCLAREN SAND
130	5.46	35.0	30.0	1.053	978	450	CRETACEOUS	1977	TANGLEFLAGS NORTH	G.P. SAND
1166	9.02	35.0	30.0	1.020	970	515	CRETACEOUS	1977		LLOYDMINSTER/CUMMINGS SAND
259	6.29	35.0	22.0	1.020	979	516	CRETACEOUS	1972	TANGLEFLAGS WEST	G.P. SAND
405	3.87	35.0	25.0	1.020	967	563	CRETACEOUS	1972		LLOYDMINSTER SAND
227	4.71	35.0	30.0	1.053	980	462	CRETACEOUS	1978		MCLAREN SAND
518	3.54	35.0	30.0	1.028	975	498	CRETACEOUS	1972		SPARKY SAND
0	0.00	0.0	0.0	1.020	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
356	8.10	35.0	30.0	1.053	977	485	CRETACEOUS	1971	WESTHAZEL	G.P. SAND
583	5.84	35.0	30.0	1.111	967	455	CRETACEOUS	1969		SPARKY SAND
243	11.22	33.0	9.0	1.035	980	660	CRETACEOUS	1980	WINTER	CUMMINGS SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
MISCELLANEOUS	BIRDBEAR	0.055	11.00	0.00	11.00	0.006	0.000	0.006	0.002	0.004	0.482
	COLONY SAND	6.581	2.31	0.00	2.31	0.152	0.000	0.152	0.083	0.069	9.524
	CUMMINGS SAND	13.447	0.66	0.00	0.66	0.089	0.000	0.089	0.064	0.025	3.957
	DINA SAND	3.023	0.30	0.00	0.30	0.009	0.000	0.009	0.006	0.003	0.000
	G.P. SAND	27.643	2.83	0.00	2.83	0.782	0.000	0.782	0.465	0.317	46.247
	LLOYDMINSTER SAND	12.710	1.73	1.27	3.00	0.220	0.161	0.381	0.298	0.083	14.433
	MANNVILLE SAND	0.744	2.02	0.00	2.02	0.015	0.000	0.015	0.007	0.008	1.483
	MANNVILLE SANDS (COMMINGLED)	15.391	1.77	0.00	1.77	0.272	0.000	0.272	0.195	0.077	11.882
	MCLAREN SAND	11.300	1.73	0.00	1.73	0.195	0.000	0.195	0.139	0.056	10.889
	REX SAND	5.051	0.95	0.00	0.95	0.048	0.000	0.048	0.029	0.018	2.485
	SPARKY SAND	34.830	3.37	0.00	3.37	1.174	0.000	1.174	0.731	0.443	66.496
	WASECA SAND	20.533	2.61	0.00	2.61	0.536	0.000	0.536	0.290	0.246	21.598
	TOTAL AREA I HEAVY	**1198.493**				**58.572**	**15.413**	**73.985**	**48.155**	**25.830**	**2571.343**
AREA II - HEAVY											
ALSASK	BASAL MANNVILLE SAND	0.162	9.90	0.00	9.90	0.016	0.000	0.016	0.014	0.002	0.681
BUFFALO COULEE	BAKKEN SAND	5.082	2.50	8.70	11.20	0.127	0.442	0.569	0.355	0.214	25.989
BUFF. COULEE NORTH	BAKKEN SAND	3.342	2.30	0.90	3.20	0.077	0.030	0.107	0.079	0.028	5.963
CACTUS LAKE	BASAL MANNVILLE-BAKKEN (VOL UNIT 1)	4.453	11.20	14.20	25.40	0.499	0.632	1.131	0.358	0.773	16.210
	BASAL MANNVILLE-BAKKEN (VOL UNIT 2)	24.802	9.95	12.20	22.15	2.468	3.026	5.494	1.189	4.305	101.075
	BASAL MANNVILLE-BAKKEN (NON-UNIT)	1.930	13.80	0.00	13.80	0.266	0.000	0.266	0.182	0.084	14.927
COLEVILLE	BAKKEN SAND	51.072	4.60	15.90	20.50	2.349	8.120	10.469	7.300	3.169	181.602
	MANNVILLE SANDS	1.517	5.50	0.00	5.50	0.083	0.000	0.083	0.067	0.016	3.958
COLEVILLE SOUTH	BAKKEN SAND (UNIT)	4.446	4.52	0.00	4.52	0.201	0.000	0.201	0.143	0.058	19.031
	BAKKEN SAND (NON-UNIT)	2.147	5.90	0.00	5.90	0.127	0.000	0.127	0.062	0.065	10.418
	MANNVILLE SANDS	2.066	3.50	0.00	3.50	0.072	0.000	0.072	0.026	0.046	3.732
COSINE LAKE	LLOYDMINSTER SAND	7.487	0.75	0.00	0.75	0.056	0.000	0.056	0.053	0.003	3.625
COURT	BAKKEN SAND (VOLUNTARY UNIT)	6.786	6.30	4.67	10.97	0.554	0.410	0.964	0.458	0.506	103.670
	BAKKEN SAND (NON-UNIT)	1.274	5.20	0.00	5.20	0.066	0.000	0.066	0.037	0.029	11.971
DRUID	MANNVILLE SANDS	1.972	2.80	0.00	2.80	0.055	0.000	0.055	0.025	0.030	2.343
FUSILIER	BAKKEN SAND	3.530	14.60	0.00	14.60	0.515	0.000	0.515	0.236	0.279	20.268
HEARTS HILL	BAKKEN SAND	2.887	4.80	0.00	4.80	0.139	0.000	0.139	0.076	0.063	11.122
HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)	3.128	4.00	5.30	9.30	0.125	0.166	0.291	0.194	0.097	12.468
	BAKKEN SAND (NON-UNIT)	5.604	7.10	0.00	7.10	0.398	0.000	0.398	0.225	0.173	22.570
LOVERNA	DETRITAL	2.493	4.30	0.00	4.30	0.107	0.000	0.107	0.089	0.018	2.248
LUSELAND	BAKKEN SAND	15.872	5.80	0.87	6.67	0.921	0.138	1.059	0.276	0.783	49.007
NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)	8.498	2.30	13.30	15.60	0.195	1.130	1.325	0.951	0.374	27.384
	BAKKEN SAND (NON-UNIT)	3.206	8.40	0.00	8.40	0.269	0.000	0.269	0.201	0.068	12.187
NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)	4.147	6.00	13.40	19.40	0.249	0.556	0.805	0.665	0.140	19.033
	BASAL MANNVILLE SAND (NON-UNIT)	0.187	1.80	0.00	1.80	0.003	0.000	0.003	0.003	0.000	0.011
NORTH SMILEY	BAKKEN SAND	1.193	6.50	0.00	6.50	0.078	0.000	0.078	0.036	0.042	7.268
PLOVER LAKE	BAKKEN SAND	11.817	5.20	0.00	5.20	0.604	0.000	0.604	0.306	0.298	43.777
PLOVER LAKE	MCLAREN SAND	4.927	4.90	0.00	4.90	0.241	0.000	0.241	0.075	0.166	28.227
MISCELLANEOUS	BAKKEN SAND	13.304	3.70	0.00	3.70	0.492	0.000	0.492	0.222	0.270	30.135
	BASAL MANNVILLE SAND	5.112	1.90	0.00	1.90	0.097	0.000	0.097	0.040	0.057	10.281
	BIRDBEAR	0.075	5.30	0.00	5.30	0.004	0.000	0.004	0.004	0.000	0.000
	DETRITAL	4.521	2.40	0.00	2.40	0.109	0.000	0.109	0.067	0.042	8.809
	LLOYDMINISTER SAND	0.282	3.50	0.00	3.50	0.010	0.000	0.010	0.007	0.003	0.567
	MANNVILLE SAND	17.531	2.40	0.00	2.40	0.421	0.000	0.421	0.176	0.245	37.488
	MCLAREN SAND	0.069	18.80	0.00	18.80	0.013	0.000	0.013	0.010	0.003	0.502
	SPARKY SAND	0.079	7.60	0.00	7.60	0.006	0.000	0.006	0.005	0.001	0.739
	TOTAL AREA II HEAVY	**228.800**				**12.812**	**14.650**	**26.682**	**14.212**	**12.450**	**856.352**

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
32	3.00	10.0	40.0	1.053	–	–	CRETACEOUS	–	MISCELLANEOUS	BIRDBEAR
559	5.06	35.0	30.0	1.053	–	–	CRETACEOUS	–		COLONY SAND
656	8.81	35.0	30.0	1.053	–	–	CRETACEOUS	–		CUMMINGS SAND
178	7.30	35.0	30.0	1.053	–	–	CRETACEOUS	–		DINA SAND
2024	5.87	35.0	30.0	1.053	–	–	CRETACEOUS	–		G.P. SAND
955	5.72	35.0	30.0	1.053	–	–	CRETACEOUS	–		LLOYDMINSTER SAND
41	7.80	35.0	30.0	1.053	–	–	CRETACEOUS	–		MANNVILLE SAND
797	8.30	35.0	30.0	1.053	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1255	3.87	35.0	30.0	1.053	–	–	CRETACEOUS	–		MCLAREN SAND
324	6.70	35.0	30.0	1.053	–	–	CRETACEOUS	–		REX SAND
3334	4.48	35.0	30.0	1.053	–	–	CRETACEOUS	–		SPARKY SAND
1508	5.86	35.0	30.0	1.053	–	–	CRETACEOUS	–		WASECA SAND
									AREA II - HEAVY	
45	3.96	26.9	55.0	1.333	953	818	CRETACEOUS	1968	ALSASK	BASAL MANNVILLE SAND
719	3.72	26.6	25.0	1.050	978	823	MISSISSIPPIAN	1952	BUFFALO COULEE	BAKKEN SAND
275	6.10	30.0	31.0	1.039	981	814	MISSISSIPPIAN	1952	BUFF. COULEE NORTH	BAKKEN SAND
259	9.16	30.0	35.0	1.039	964	851	MISSISSIPPIAN	1974	CACTUS LAKE	BASAL MANNVILLE-BAKKEN (VOL UNIT 1)
2736	4.83	30.0	35.0	1.039	964	851	MISSISSIPPIAN	1974		BASAL MANNVILLE-BAKKEN (VOL UNIT 2)
182	5.97	31.9	35.0	1.039	964	851	MISSISSIPPIAN	1974		BASAL MANNVILLE-BAKKEN (NON-UNIT)
2880	11.46	24.1	31.0	1.078	982	823	MISSISSIPPIAN	1951	COLEVILLE	BAKKEN SAND
227	3.96	25.0	25.0	1.111	976	765	CRETACEOUS	1952		MANNVILLE SANDS
534	3.91	29.5	25.0	1.039	972	818	MISSISSIPPIAN	1983	COLEVILLE SOUTH	BAKKEN SAND (UNIT)
146	6.68	30.5	25.0	1.039	972	818	MISSISSIPPIAN	1983		BAKKEN SAND (NON-UNIT)
129	9.49	25.0	25.0	1.111	974	757	CRETACEOUS	1983		MANNVILLE SANDS
871	4.70	29.0	30.0	1.110	965	776	CRETACEOUS	1972	COSINE LAKE	LLOYDMINSTER SAND
583	7.30	28.5	23.0	1.063	953	863	MISSISSIPPIAN	1982	COURT	BAKKEN SAND (VOLUNTARY UNIT)
65	8.62	31.4	23.0	1.063	953	863	MISSISSIPPIAN	1982		BAKKEN SAND (NON-UNIT)
178	6.79	25.9	30.0	1.111	969	729	CRETACEOUS	1969	DRUID	MANNVILLE SANDS
247	7.69	25.4	22.0	1.066	962	799	MISSISSIPPIAN	1955	FUSILIER	BAKKEN SAND
259	5.67	27.6	25.0	1.053	953	758	MISSISSIPPIAN	1983	HEARTS HILL	BAKKEN SAND
228	5.86	31.5	22.0	1.053	975	865	MISSISSIPPIAN	1973	HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)
421	7.19	25.3	22.0	1.066	976	865	MISSISSIPPIAN	1973		BAKKEN SAND (NON-UNIT)
146	10.50	28.9	25.0	1.333	957	853	CRET.-JURASSIC	1952	LOVERNA	DETRITAL
615	11.54	31.4	25.0	1.053	983	739	MISSISSIPPIAN	1979	LUSELAND	BAKKEN SAND
452	9.40	30.0	30.0	1.050	958	878	MISSISSIPPIAN	1965	NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)
259	7.23	23.4	22.0	1.066	958	878	MISSISSIPPIAN	1965		BAKKEN SAND (NON-UNIT)
313	6.80	28.0	27.0	1.049	970	838	CRETACEOUS	1964	NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)
16	5.25	32.0	27.0	1.049	970	838	CRETACEOUS	1964		BASAL MANNVILLE SAND (NON-UNIT)
129	5.28	25.1	25.0	1.075	985	810	MISSISSIPPIAN	1981	NORTH SMILEY	BAKKEN SAND
567	9.19	31.3	25.0	1.053	987	817	MISSISSIPPIAN	1974	PLOVER LAKE	BAKKEN SAND
105	21.46	30.7	25.0	1.053	984	720	CRETACEOUS	1985	PLOVER LAKE [4]	MCLAREN SAND
955	7.20	27.5	25.0	1.066	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	BAKKEN SAND
307	7.64	30.8	25.0	1.053	–	–	CRETACEOUS	–		BASAL MANNVILLE SAND
32	6.00	8.7	40.0	1.333	–	–	DEVONIAN	–		BIRDBEAR
372	8.68	26.7	30.0	1.335	–	–	CRET.-JURASSIC	–		DETRITAL
32	5.30	25.0	30.0	1.053	–	–	CRETACEOUS	–		LLOYDMINSTER SAND
971	9.08	28.5	25.0	1.075	–	–	CRETACEOUS	–		MANNVILLE SAND
32	1.75	27.2	40.0	1.333	–	–	CRETACEOUS	–		MCLAREN SAND
16	2.00	30.0	15.0	1.033	–	–	CRETACEOUS	–		SPARKY SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
AREA II - LIGHT											
AVON HILL	VIKING (VOL UNIT)	4.483	4.52	0.00	4.52	0.203	0.000	0.203	0.199	0.004	6.058
	VIKING (NON-UNIT)	4.058	7.30	0.00	7.30	0.296	0.000	0.296	0.258	0.038	9.610
DODSLAND	VIKING (EAGLE LAKE VOL UNIT)	12.724	15.60	14.70	30.30	1.985	1.870	3.855	2.193	1.662	52.189
	VIKING (EAST DODS. VOL UNIT)	24.431	3.97	0.00	3.97	0.970	0.000	0.970	0.883	0.087	21.947
	VIKING (GLENEATH UNIT)	9.548	13.40	15.80	29.20	1.279	1.508	2.787	2.048	0.739	55.816
	VIKING (GLENEATH S. VOL UNIT)	0.396	15.60	1.60	17.20	0.062	0.006	0.068	0.044	0.024	2.118
	VIKING (KIYIU LAKE VOL UNIT)	2.323	6.20	0.00	6.20	0.144	0.000	0.144	0.087	0.057	9.153
	VIKING (KIYIU LAKE VOL UNIT NO. 2)	2.327	3.10	0.60	3.70	0.072	0.014	0.086	0.058	0.028	5.457
	VIKING (NORTH DODS. VOL UNIT)	7.253	4.10	0.00	4.10	0.297	0.000	0.297	0.220	0.077	12.339
	(NORTH DODS. VOL UNIT NO. 2)	0.942	5.90	0.00	5.90	0.056	0.000	0.056	0.016	0.040	13.212
	VIKING (NON-UNIT)	50.474	6.80	0.40	7.20	3.432	0.202	3.634	2.761	0.873	141.472
EUREKA	VIKING (NORTH EUREKA UNIT)	6.709	10.00	8.80	18.80	0.671	0.590	1.261	1.102	0.159	6.031
	VIKING (SOUTH EUREKA UNIT)	6.811	9.50	12.10	21.60	0.647	0.824	1.471	1.196	0.275	23.142
	VIKING (NON-UNIT)	6.190	3.00	0.00	3.00	0.186	0.000	0.186	0.139	0.047	10.898
FORGAN	VIKING	1.609	4.35	0.00	4.35	0.070	0.000	0.070	0.057	0.013	4.359
KERROBERT	VIKING	38.424	5.00	0.60	5.60	1.921	0.231	2.152	1.211	0.941	172.602
LUCKY HILLS	VIKING (VOLUNTARY UNIT)	1.573	5.85	0.00	5.85	0.092	0.000	0.092	0.075	0.017	1.980
	VIKING (NON-UNIT)	1.824	6.70	0.00	6.70	0.122	0.000	0.122	0.094	0.028	4.052
PLATO	VIKING (VOL UNIT NO. 1)	6.542	4.00	1.20	5.20	0.262	0.079	0.341	0.303	0.038	10.288
	VIKING (NON-UNIT)	3.060	2.12	0.00	2.12	0.065	0.000	0.065	0.050	0.015	8.605
PLATO NORTH	VIKING	18.212	5.76	0.00	5.76	0.934	0.000	0.934	0.522	0.412	75.065
PLENTY	VIKING	4.740	3.80	0.00	3.80	0.180	0.000	0.180	0.062	0.118	23.753
PRAIRIEDALE	VIKING	5.979	2.27	0.00	2.27	0.136	0.000	0.136	0.071	0.065	24.548
SMILEY-DEWAR	VIKING	25.450	15.00	6.02	21.02	3.818	1.532	5.350	4.466	0.884	74.270
VERENDRYE	VIKING	14.565	3.81	0.00	3.81	0.555	0.000	0.555	0.195	0.360	94.804
WHITESIDE	VIKING SAND (VOL UNIT)	2.668	9.97	0.00	9.97	0.266	0.000	0.266	0.261	0.005	2.837
	VIKING SAND (NON-UNIT)	4.910	4.26	0.00	4.26	0.209	0.000	0.209	0.159	0.050	18.247
MISCELLANEOUS	VIKING SAND	11.858	1.43	0.00	1.43	0.170	0.000	0.170	0.106	0.064	35.233
	VIKING CHERT	0.158	1.20	0.00	1.20	0.002	0.000	0.002	0.002	0.000	0.000
	TOTAL AREA II LIGHT	**278.249**				**19.102**	**6.856**	**25.958**	**18.838**	**7.120**	**920.085**
AREA III - MEDIUM											
ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)	0.992	5.00	5.70	10.70	0.050	0.057	0.107	0.078	0.029	2.580
	UPPER SHAUNAVON (NON-UNIT)	0.031	6.45	0.00	6.45	0.002	0.000	0.002	0.002	0.000	0.000
ANTELOPE LAKE EAST	ROSERAY SAND	0.457	1.80	0.00	1.80	0.008	0.000	0.008	0.008	0.000	0.000
BATTLE CREEK	MADISON	0.428	3.97	0.00	3.97	0.017	0.000	0.017	0.017	0.000	0.036
BATTLE CREEK	UPPER SHAUNAVON	0.251	15.10	0.00	15.10	0.038	0.000	0.038	0.032	0.006	0.808
BATTLE CREEK SOUTH	UPPER SHAUNAVON	2.157	12.60	0.00	12.60	0.272	0.000	0.272	0.041	0.231	25.541
BATTRUM EAST	ROSERAY SAND	0.360	5.00	22.80	27.80	0.018	0.082	0.100	0.046	0.054	28.397
BATTRUM NORTH	ROSERAY SAND	2.743	6.64	0.00	6.64	0.182	0.000	0.182	0.113	0.069	10.950
BATTRUM	ROSERAY SAND (UNIT NO. 1)	29.044	10.00	22.20	32.20	2.904	6.448	9.352	5.212	4.140	155.971
	ROSERAY SAND (UNIT NO. 2)	5.990	6.60	39.70	46.30	0.395	2.378	2.773	1.431	1.342	76.691
	ROSERAY SAND (VOL UNIT NO. 3)	8.086	8.00	30.40	38.40	0.647	2.458	3.105	1.513	1.592	84.405
	ROSERAY SAND (UNIT NO. 4)	3.431	8.30	41.10	49.40	0.285	1.410	1.695	1.103	0.592	68.016
	ROSERAY SAND (NON-UNIT)	0.872	8.80	0.00	8.80	0.077	0.000	0.077	0.032	0.045	7.504
BENCH	UPPER SHAUNAVON	9.503	4.05	0.00	4.05	0.385	0.000	0.385	0.299	0.086	15.964
BEVERLEY	CANTUAR SAND	2.237	3.00	0.00	3.00	0.067	0.000	0.067	0.047	0.020	2.915
	CANTUAR SAND (VOL UNIT NO. 1)	6.243	10.09	7.29	17.38	0.630	0.455	1.085	0.469	0.616	19.185
BEVERLEY EAST	CANTUAR SAND	1.470	9.00	0.00	9.00	0.132	0.000	0.132	0.066	0.066	11.366
BEVERLEY NORTH	CANTUAR SAND (NON-UNIT)	0.287	3.80	0.00	3.80	0.011	0.000	0.011	0.006	0.005	1.125
	CANTUAR SAND (VOL UNIT NO. 1)	5.673	5.16	12.06	17.22	0.293	0.684	0.977	0.228	0.749	10.305

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
									AREA II - LIGHT	
1586	2.47	23.0	45.0	1.103	844	725	CRETACEOUS	1959	AVON HILL	VIKING (VOL UNIT)
1456	2.43	23.0	45.0	1.103	844	725	CRETACEOUS	1959		VIKING (NON-UNIT)
3772	3.02	22.4	45.0	1.103	840	671	CRETACEOUS	1956	DODSLAND	VIKING (EAGLE LAKE VOL UNIT)
6814	3.21	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (EAST DODS. VOL UNIT)
3011	2.93	21.7	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (GLENEATH UNIT)
129	2.75	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (GLENEATH S. VOL UNIT)
842	2.47	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (KIYIU LAKE VOL UNIT)
712	2.90	22.6	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (KIYIU LAKE VOL UNIT NO. 2)
1910	3.40	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (NORTH DODS. VOL UNIT)
356	2.37	22.4	45.0	1.103	840	671	CRETACEOUS	1956		(NORTH DODS. VOL UNIT NO. 2)
18520	2.44	22.4	45.0	1.103	842	671	CRETACEOUS	1956		VIKING (NON-UNIT)
1683	3.32	23.0	42.0	1.111	853	724	CRETACEOUS	1954	EUREKA	VIKING (NORTH EUREKA UNIT)
1522	3.69	23.0	42.0	1.100	853	724	CRETACEOUS	1954		VIKING (SOUTH EUREKA UNIT)
1230	4.15	23.0	42.0	1.100	849	724	CRETACEOUS	1954		VIKING (NON-UNIT)
550	2.57	23.0	45.0	1.111	842	714	CRETACEOUS	1981	FORGAN	VIKING
16921	1.98	23.0	45.0	1.103	842	714	CRETACEOUS	1981	KERROBERT	VIKING
453	3.05	23.0	45.0	1.111	843	716	CRETACEOUS	1959	LUCKY HILLS	VIKING (VOLUNTARY UNIT)
566	3.10	21.0	45.0	1.111	843	716	CRETACEOUS	1959		VIKING (NON-UNIT)
1554	3.29	22.0	38.0	1.066	853	644	CRETACEOUS	1968	PLATO	VIKING (VOL UNIT NO. 1)
842	2.84	22.0	38.0	1.066	856	644	CRETACEOUS	1968		VIKING (NON-UNIT)
4581	2.63	23.0	35.0	1.111	865	705	CRETACEOUS	1978	PLATO NORTH	VIKING
1376	2.56	23.0	35.0	1.111	853	640	CRETACEOUS	1985	PLENTY	VIKING
1149	4.57	23.0	45.0	1.111	870	743	CRETACEOUS	1984	PRAIRIEDALE	VIKING
4759	4.42	24.0	45.0	1.091	875	701	CRETACEOUS	1953	SMILEY-DEWAR	VIKING
3270	3.31	23.0	35.0	1.111	865	713	CRETACEOUS	1987	VERENDRYE	VIKING
1214	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953	WHITESIDE	VIKING
2234	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953		VIKING SAND (VOL UNIT)
2525	3.49	23.0	35.0	1.111	–	–	CRETACEOUS	–		VIKING SAND (NON-UNIT)
32	3.51	24.0	35.0	1.111	–	–	CRETACEOUS	–	MISCELLANEOUS	VIKING SAND
										VIKING CHERT
									AREA III - MEDIUM	
442	2.13	18.0	40.0	1.025	914	1037	JURASSIC	1964	ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)
16	1.83	17.0	40.0	0.976	–	1037	JURASSIC	1964		UPPER SHAUNAVON (NON-UNIT)
65	5.00	23.9	37.0	1.070	923	950	JURASSIC	1964	ANTELOPE LAKE EAST	ROSERAY SAND
49	7.62	16.0	25.0	1.047	997	1390	MISSISSIPPIAN	1966	BATTLE CREEK	MADISON
65	4.57	12.5	25.0	1.111	945	1337	JURASSIC	1966	BATTLE CREEK	UPPER SHAUNAVON
162	14.70	13.4	25.0	1.111	915	1305	JURASSIC	1968	BATTLE CREEK SOUTH	UPPER SHAUNAVON
81	2.99	25.1	39.3	1.024	938	913	JURASSIC	1987	BATTRUM EAST	ROSERAY SAND
259	7.58	24.3	41.0	1.026	937	866	JURASSIC	1979	BATTRUM NORTH	ROSERAY SAND
1599	10.73	26.0	33.2	1.026	938	883	JURASSIC	1955	BATTRUM	ROSERAY SAND (UNIT NO. 1)
324	9.75	27.4	29.0	1.026	–	883	JURASSIC	1955		ROSERAY SAND (UNIT NO. 2)
971	5.44	25.2	38.1	1.019	–	883	JURASSIC	1955		ROSERAY SAND (VOL UNIT NO. 3)
453	5.09	25.1	39.3	1.024	–	883	JURASSIC	1955		ROSERAY SAND (UNIT NO. 4)
97	6.41	23.7	39.3	1.026	–	883	JURASSIC	1955		ROSERAY SAND (NON-UNIT)
2024	4.29	13.7	15.0	1.064	915	1347	JURASSIC	1969	BENCH	UPPER SHAUNAVON
324	6.50	21.2	46.1	1.076	920	991	CRETACEOUS	1969	BEVERLEY	CANTUAR SAND
1230	4.30	25.1	49.4	1.076	920	991	CRETACEOUS	1969		CANTUAR SAND (VOL UNIT NO. 1)
550	1.63	25.2	30.0	1.076	927	975	CRETACEOUS	1985	BEVERLEY EAST	CANTUAR SAND
32	6.50	28.0	59.4	1.076	932	969	CRETACEOUS	1987	BEVERLEY NORTH	CANTUAR SAND (NON-UNIT)
1023	5.95	24.7	59.4	1.076	–	969	CRETACEOUS	1967		CANTUAR SAND (VOL UNIT NO. 1)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY (PER CENT)	ENHANCED (PER CENT)	TOTAL (PER CENT)	INITIAL RESERVES PRIMARY (MILLION CUBIC METRES)	ENHANCED (MILLION CUBIC METRES)	TOTAL (MILLION CUBIC METRES)	CUMULATIVE PROD. DEC 31/89 (MILLION CUBIC METRES)	REMAINING RESERVES (MILLION CUBIC METRES)	1989 PROD 1000 m^3
BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)	4.036	15.00	31.40	46.40	0.605	1.267	1.872	1.652	0.220	34.828
	UPPER ROSERAY SAND (BEV. VOL UNIT 2)	1.499	9.70	8.51	18.21	0.145	0.128	0.273	0.100	0.173	13.844
	UPPER ROSERAY SAND (NON-UNIT)	0.081	21.00	0.00	21.00	0.017	0.000	0.017	0.017	0.000	0.210
BONE CREEK	UPPER SHAUNAVON (UNIT)	12.207	5.00	18.00	23.00	0.610	2.197	2.807	2.417	0.390	38.102
BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)	8.916	5.50	20.26	25.76	0.490	1.806	2.296	1.008	1.288	65.197
	UPPER SHAUNAVON (NON-UNIT)	2.717	5.40	0.00	5.40	0.147	0.000	0.147	0.057	0.090	14.679
BUTTE WEST	UPPER SHAUNAVON (NON-UNIT)	1.022	7.30	0.00	7.30	0.075	0.000	0.075	0.007	0.068	5.648
CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)	4.814	3.10	2.90	6.00	0.149	0.140	0.289	0.206	0.083	10.482
	CANTUAR SAND (UNIT NO. 2)	0.813	2.30	0.00	2.30	0.019	0.000	0.019	0.014	0.005	1.030
CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)	2.899	6.80	2.90	9.70	0.197	0.084	0.281	0.227	0.054	6.671
	ROSERAY SAND (UNIT NO. 2)	1.989	11.40	1.90	13.30	0.227	0.038	0.265	0.238	0.027	3.674
	ROSERAY SAND (NON-UNIT)	0.014	1.00	0.00	1.00	0.000	0.000	0.000	0.000	0.000	0.029
CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)	13.927	14.40	0.00	14.40	2.005	0.000	2.005	1.707	0.298	50.344
CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)	22.107	8.70	12.30	21.00	1.923	2.719	4.642	4.136	0.506	90.056
	CANTUAR SAND (NON-UNIT)	0.111	6.30	0.00	6.30	0.007	0.000	0.007	0.004	0.003	0.623
CANTUAR NORTH	ROSERAY SAND	1.000	10.20	0.00	10.20	0.102	0.000	0.102	0.069	0.033	5.323
CHAMBERY	UPPER SHAUNAVON	1.739	6.30	0.00	6.30	0.110	0.000	0.110	0.070	0.040	4.384
CLINTONVILLE	SHAUNAVON	4.563	1.80	0.00	1.80	0.082	0.000	0.082	0.066	0.016	2.429
COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)	1.071	14.00	7.10	21.10	0.150	0.076	0.226	0.222	0.004	2.457
	UPPER SHAUNAVON (NON-UNIT)	0.071	1.41	0.00	1.41	0.001	0.000	0.001	0.001	0.000	0.000
COVINGTON WEST	UPPER SHAUNAVON	0.839	13.30	0.00	13.30	0.112	0.000	0.112	0.087	0.025	3.379
DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)	9.383	12.00	14.50	26.50	1.126	1.361	2.487	2.289	0.198	32.108
	UPPER SHAUNAVON (DELTA UNIT NO. 2)	2.540	7.00	10.50	17.50	0.178	0.267	0.445	0.354	0.091	7.706
	UPPER SHAUNAVON (VOL UNIT NO. 3)	0.989	9.60	7.70	17.30	0.095	0.076	0.171	0.093	0.078	6.229
	UPPER SHAUNAVON (NON-UNIT)	0.940	0.64	0.00	0.64	0.006	0.000	0.006	0.006	0.000	0.072
DOLLARD	LOWER SHAUNAVON (NON-UNIT)	0.285	0.70	0.00	0.70	0.002	0.000	0.002	0.001	0.001	0.576
DOLLARD	UPPER SHAUNAVON (UNIT)	26.064	20.00	31.10	51.10	5.213	8.106	13.319	12.962	0.357	85.843
	UPPER SHAUNAVON (E. DOLL. VOL UNIT)	1.648	20.00	23.70	43.70	0.330	0.391	0.721	0.632	0.089	13.527
	UPPER SHAUNAVON (NON-UNIT)	0.774	17.60	0.00	17.60	0.136	0.000	0.136	0.123	0.013	3.318
EASTBROOK	UPPER SHAUNAVON	2.887	3.30	0.00	3.30	0.095	0.000	0.095	0.067	0.028	8.269
EASTEND	SHAUNAVON	5.950	1.36	0.00	1.36	0.081	0.000	0.081	0.078	0.003	2.557
FOSTERTON	ROSERAY SAND (MAIN UNIT)	21.994	17.00	25.60	42.60	3.739	5.630	9.369	8.819	0.550	69.923
	ROSERAY SAND (N.W. UNIT)	1.978	11.00	18.50	29.50	0.218	0.366	0.584	0.563	0.021	2.942
	ROSERAY SAND (W. FOST. VOL UNIT)	1.220	11.00	30.60	41.60	0.134	0.373	0.507	0.471	0.036	6.900
FOSTERTON SOUTH	CANTUAR SAND	0.835	9.00	0.00	9.00	0.075	0.000	0.075	0.047	0.028	3.740
FOSTERTON SOUTH	ROSERAY SAND	1.012	10.10	0.00	10.10	0.102	0.000	0.102	0.041	0.061	7.194
GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)	2.729	3.30	17.50	20.80	0.090	0.478	0.568	0.349	0.219	22.460
	BASAL CANTUAR SAND (JOHNSTON UNIT)	1.030	6.50	9.23	15.73	0.067	0.095	0.162	0.141	0.021	2.377
	BASAL CANTUAR SAND (NON-UNIT)	1.157	3.00	0.00	3.00	0.035	0.000	0.035	0.030	0.005	0.000
GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)	0.614	24.00	16.70	40.70	0.147	0.103	0.250	0.212	0.038	2.826
	UPPER SHAUNAVON (NON-UNIT)	2.648	6.00	0.00	6.00	0.159	0.000	0.159	0.148	0.011	6.443
GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)	6.822	10.00	37.60	47.60	0.682	2.565	3.247	3.116	0.131	30.325
	UPPER SHAUNAVON (NON-UNIT)	0.188	22.00	0.00	22.00	0.037	0.000	0.037	0.036	0.001	0.864
GULL LAKE SOUTH	UPPER SHAUNAVON (VOL UNIT NO. 1)	1.458	12.40	9.80	22.20	0.181	0.143	0.324	0.140	0.184	8.531
	UPPER SHAUNAVON (NON-UNIT)	0.019	5.30	0.00	5.30	0.001	0.000	0.001	0.001	0.000	0.000
HAZLET	ROSERAY SAND (UNIT)	1.742	26.10	18.80	44.90	0.455	0.327	0.782	0.449	0.333	24.112
	ROSERAY SAND (NON-UNIT)	0.253	0.40	0.00	0.40	0.001	0.000	0.001	0.001	0.000	0.074
ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)	3.221	16.60	16.30	32.90	0.535	0.525	1.060	0.976	0.084	9.098
	UPPER SHAUNAVON (NON-UNIT)	0.934	5.40	0.00	5.40	0.050	0.000	0.050	0.028	0.022	5.065
INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)	1.399	17.00	9.10	26.10	0.238	0.127	0.365	0.152	0.213	18.039
	UPPER SHAUNAVON (UNIT)	22.063	9.00	32.70	41.70	1.986	7.215	9.201	7.866	1.335	133.880
	UPPER SHAUNAVON (NON-UNIT)	0.027	7.40	0.00	7.40	0.002	0.000	0.002	0.002	0.000	0.246
JAVA	CANTUAR SAND	0.975	1.80	4.56	6.36	0.018	0.044	0.062	0.048	0.014	3.149
JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)	0.201	17.90	0.00	17.90	0.036	0.000	0.036	0.035	0.001	0.000

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ---PER CENT---	AVERAGE CONNATE WATER ---PER CENT---	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
805	3.11	28.0	38.8	1.063	926	983	JURASSIC	1952	BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)
316	2.90	24.4	28.0	1.074	–	983	JURASSIC	1952		UPPER ROSERAY SAND (BEV. VOL UNIT 2)
16	3.66	24.0	38.8	1.063	929	983	JURASSIC	1952		UPPER ROSERAY SAND (NON-UNIT)
1882	5.28	13.8	6.0	1.056	914	1341	JURASSIC	1954	BONE CREEK	UPPER SHAUNAVON (UNIT)
2137	2.54	22.8	25.0	1.041	914	1338	JURASSIC	1967	BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)
453	4.73	17.6	25.0	1.041	–	1338	JURASSIC	1967		UPPER SHAUNAVON (NON-UNIT)
130	6.38	17.3	25.0	1.053	914	1338	JURASSIC	1967	BUTTE WEST	UPPER SHAUNAVON (NON-UNIT)
783	5.18	23.3	43.6	1.079	920	965	CRETACEOUS	1956	CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)
146	4.57	23.3	43.6	1.079	929	965	CRETACEOUS	1956		CANTUAR SAND (UNIT NO. 2)
716	2.80	26.0	40.0	1.079	933	983	JURASSIC	1952	CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)
502	2.74	26.0	40.0	1.079	938	983	JURASSIC	1952		ROSERAY SAND (UNIT NO. 2)
8	1.22	26.0	40.0	1.079	–	983	JURASSIC	1952		ROSERAY SAND (NON-UNIT)
2765	2.65	27.2	24.6	1.079	964	991	JURASSIC	1952	CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)
3168	5.06	26.4	43.6	1.079	922	975	CRETACEOUS	1952	CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)
16	5.05	26.4	43.6	1.079	918	975	CRETACEOUS	1952		CANTUAR SAND (NON-UNIT)
289	2.84	21.9	40.0	1.079	941	970	JURASSIC	1968	CANTUAR NORTH	ROSERAY SAND
583	2.50	17.1	25.0	1.075	926	1505	JURASSIC	1980	CHAMBERY	UPPER SHAUNAVON
518	8.56	14.6	25.0	1.064	915	1362	JURASSIC	1953	CLINTONVILLE	SHAUNAVON
376	2.44	15.5	22.0	1.036	894	1330	JURASSIC	1966	COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)
32	1.40	21.0	22.0	1.036	894	1330	JURASSIC	1966		UPPER SHAUNAVON (NON-UNIT)
259	4.88	11.8	25.0	1.333	906	1336	JURASSIC	1969	COVINGTON WEST	UPPER SHAUNAVON
2159	3.20	20.4	28.5	1.074	914	1065	JURASSIC	1956	DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)
716	3.81	20.0	50.0	1.074	–	1065	JURASSIC	1956		UPPER SHAUNAVON (DELTA UNIT NO. 2)
129	5.86	23.9	41.2	1.074	914	1065	JURASSIC	1956		UPPER SHAUNAVON (VOL UNIT NO. 3)
162	7.12	17.5	50.0	1.074	–	1065	JURASSIC	1956		UPPER SHAUNAVON (NON-UNIT)
32	6.40	17.2	12.0	1.087	927	1392	JURASSIC	1987	DOLLARD	LOWER SHAUNAVON (NON-UNIT)
3642	4.42	20.0	12.0	1.087	914	1402	JURASSIC	1953	DOLLARD	UPPER SHAUNAVON (UNIT)
469	3.20	17.2	30.6	1.087	–	1402	JURASSIC	1953		UPPER SHAUNAVON (E. DOLL. VOL UNIT)
227	3.19	13.2	12.0	1.087	–	1402	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
453	6.30	14.5	25.0	1.075	926	1420	JURASSIC	1966	EASTBROOK	UPPER SHAUNAVON
971	6.90	12.2	20.0	1.099	927	1457	JURASSIC	1952	EASTEND	SHAUNAVON
1012	9.81	28.8	19.0	1.053	907	975	CRET.-JURASSIC	1952	FOSTERTON	ROSERAY SAND (MAIN UNIT)
104	8.44	28.8	19.0	1.035	933	975	CRET.-JURASSIC	1952		ROSERAY SAND (N.W. UNIT)
146	5.03	25.0	30.0	1.053	–	975	CRET.-JURASSIC	1952		ROSERAY SAND (W. FOST. VOL UNIT)
81	7.64	22.4	35.0	1.079	947	950	CRETACEOUS	1965	FOSTERTON SOUTH	CANTUAR SAND
81	8.70	21.6	30.0	1.053	933	988	JURASSIC	1965	FOSTERTON SOUTH	ROSERAY SAND
449	3.59	26.0	30.0	1.075	914	1100	CRETACEOUS	1953	GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)
132	6.58	21.1	39.5	1.076	–	1100	CRETACEOUS	1953		BASAL CANTUAR SAND (JOHNSTON UNIT)
129	6.73	23.7	39.5	1.076	927	1100	CRETACEOUS	1953		BASAL CANTUAR SAND (NON-UNIT)
453	1.62	16.9	46.5	1.080	914	1195	JURASSIC	1953	GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)
907	3.66	16.1	46.5	1.080	907	1195	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
1230	3.93	19.4	25.0	1.031	964	1158	JURASSIC	1953	GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)
65	1.88	18.9	25.0	1.031	920	1158	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
779	1.14	24.7	30.0	1.053	891	1325	JURASSIC	1952	GULL LAKE SOUTH	UPPER SHAUNAVON (VOL UNIT NO. 1)
32	0.50	17.5	30.0	1.053	891	1325	JURASSIC	1952		UPPER SHAUNAVON (NON-UNIT)
191	5.27	23.0	21.0	1.050	920	963	JURASSIC	1963	HAZLET	ROSERAY SAND (UNIT)
32	4.57	23.0	21.0	1.050	–	963	JURASSIC	1963		ROSERAY SAND (NON-UNIT)
453	6.06	15.9	22.0	1.057	885	1280	JURASSIC	1965	ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)
227	3.62	15.4	22.0	1.057	–	1280	JURASSIC	1965		UPPER SHAUNAVON (NON-UNIT)
441	3.56	16.6	42.9	1.064	914	1372	JURASSIC	1954	INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)
4244	4.88	13.8	15.0	1.056	914	1372	JURASSIC	1954		UPPER SHAUNAVON (UNIT)
16	2.44	8.6	15.0	1.056	922	1372	JURASSIC	1954		UPPER SHAUNAVON (NON-UNIT)
347	2.09	24.0	40.0	1.071	947	1013	CRETACEOUS	1955	JAVA	CANTUAR SAND
61	2.44	16.4	15.0	1.031	914	1188	JURASSIC	1953	JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD
			---PER CENT---			---MILLION CUBIC METRES---					$1000 m^3$
LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)	4.936	2.50	2.63	5.13	0.123	0.130	0.253	0.224	0.029	3.009
	SHAUNAVON (NON-UNIT)	3.452	5.60	0.00	5.60	0.193	0.000	0.193	0.146	0.047	15.712
LEON LAKE	SHAUNAVON	5.763	5.87	1.30	7.17	0.338	0.075	0.413	0.301	0.112	8.899
MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)	6.858	13.00	28.60	41.60	0.892	1.961	2.853	2.629	0.224	17.757
NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)	4.017	15.00	29.00	44.00	0.603	1.165	1.768	1.696	0.072	14.734
	ROSERAY SAND (UNIT NO. 4)	4.631	15.00	34.80	49.80	0.695	1.612	2.307	2.205	0.102	27.768
	ROSERAY SAND (NON-UNIT)	0.527	11.80	0.00	11.80	0.062	0.000	0.062	0.043	0.019	4.222
NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)	0.243	11.50	0.00	11.50	0.028	0.000	0.028	0.022	0.006	1.405
	UPPER SHAUNAVON (VOLUNTARY UNIT)	0.942	6.00	8.33	14.33	0.057	0.078	0.135	0.124	0.011	3.065
	UPPER SHAUNAVON (UNIT NO. 4)	4.330	6.50	6.40	12.90	0.281	0.277	0.558	0.317	0.241	12.056
	UPPER SHAUNAVON (NON-UNIT)	1.210	8.70	0.00	8.70	0.105	0.000	0.105	0.068	0.037	6.680
NOTUKEU	UPPER SHAUNAVON	2.541	0.91	0.00	0.91	0.023	0.000	0.023	0.022	0.001	2.001
PENNANT	UPPER SHAUNAVON	0.555	20.90	11.00	31.90	0.116	0.061	0.177	0.091	0.086	5.116
RAPDAN	UPPER SHAUNAVON (UNIT)	16.574	6.10	21.21	27.31	1.011	3.515	4.526	2.911	1.615	129.156
	UPPER SHAUNAVON (N.RAPDAN VOL UNIT)	3.974	3.00	1.78	4.78	0.119	0.071	0.190	0.178	0.012	3.611
	UPPER SHAUNAVON (VOL UNIT NO. 2)	1.111	6.60	12.20	18.80	0.073	0.136	0.209	0.152	0.057	7.824
	UPPER SHAUNAVON (NON-UNIT)	1.260	0.95	0.00	0.95	0.012	0.000	0.012	0.011	0.001	0.881
RAPDAN WEST	SHAUNAVON	5.076	4.30	0.00	4.30	0.218	0.000	0.218	0.180	0.038	9.950
SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)	2.309	16.60	0.00	16.60	0.383	0.000	0.383	0.181	0.202	20.793
	ROSERAY SAND (SUCCESS UNIT)	8.563	13.20	34.70	47.90	1.130	2.971	4.101	3.582	0.519	59.306
SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)	1.440	14.30	29.40	43.70	0.206	0.423	0.629	0.590	0.039	6.398
SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)	1.038	28.40	31.10	59.50	0.295	0.323	0.618	0.251	0.367	32.937
SUFFIELD	ROSERAY SAND (UNIT NO. 1)	1.878	15.00	53.80	68.80	0.282	1.010	1.292	1.175	0.117	25.513
	ROSERAY SAND (UNIT NO. 3)	2.780	13.00	37.40	50.40	0.361	1.040	1.401	1.256	0.145	30.771
SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)	3.222	7.00	18.20	25.20	0.226	0.586	0.812	0.679	0.133	15.833
	UPPER SHAUNAVON (UNIT NO. 3)	0.805	9.90	24.20	34.10	0.080	0.195	0.275	0.213	0.062	5.231
	UPPER SHAUNAVON (NON-UNIT)	0.803	5.50	0.00	5.50	0.044	0.000	0.044	0.044	0.000	0.533
VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)	8.349	3.50	25.40	28.90	0.292	2.121	2.413	1.842	0.571	87.292
WHITEMUD	SHAUNAVON	5.378	1.28	0.00	1.28	0.069	0.000	0.069	0.057	0.012	2.239
MISCELLANEOUS	BASAL MANNVILLE SAND	0.334	3.00	0.00	3.00	0.010	0.000	0.010	0.009	0.001	0.000
	CANTUAR SAND	6.588	3.63	0.00	3.63	0.239	0.000	0.239	0.207	0.032	6.582
	GRAVELBOURG	0.124	16.10	0.00	16.10	0.020	0.000	0.020	0.016	0.004	0.664
	PREMIER SAND (N. PREMIER UNIT NO. 2)	0.232	15.00	15.20	30.20	0.035	0.035	0.070	0.064	0.006	1.112
	ROSERAY SAND	9.185	3.56	0.00	3.56	0.327	0.000	0.327	0.309	0.018	10.408
	LOWER SHAUNAVON	2.779	2.34	0.00	2.34	0.065	0.000	0.065	0.059	0.006	1.977
	UPPER SHAUNAVON	12.413	3.26	0.00	3.26	0.405	0.000	0.405	0.332	0.073	20.715
	TOTAL AREA III MEDIUM	**428.879**				**39.254**	**68.404**	**107.658**	**85.510**	**22.148**	**1991.511**
AREA IV - MEDIUM											
BENSON	MIDALE (NORTHWEST VOL UNIT)	0.513	6.00	3.70	9.70	0.031	0.019	0.050	0.036	0.014	1.458
	MIDALE (UNIT)	8.079	6.00	22.50	28.50	0.485	1.818	2.303	1.663	0.640	47.768
	MIDALE (VOLUNTARY UNIT NO. 1)	2.477	6.00	17.00	23.00	0.149	0.421	0.570	0.415	0.155	17.072
	MIDALE (VOLUNTARY UNIT NO. 2)	0.618	9.10	8.70	17.80	0.056	0.054	0.110	0.025	0.085	5.979
	MIDALE (NON-UNIT)	8.179	5.40	0.00	5.40	0.442	0.000	0.442	0.278	0.164	18.464
BENSON EAST	MIDALE	0.825	1.90	10.70	12.60	0.016	0.088	0.104	0.024	0.080	5.793
BROMHEAD	MIDALE	2.472	13.20	0.00	13.20	0.326	0.000	0.326	0.273	0.053	5.553
BRYANT	FROBISHER	0.341	13.30	0.00	13.30	0.045	0.000	0.045	0.024	0.021	3.030
BRYANT	MIDALE	2.408	3.70	0.00	3.70	0.089	0.000	0.089	0.067	0.022	6.037
COLGATE	MIDALE	1.425	43.10	0.00	43.10	0.614	0.000	0.614	0.332	0.282	52.220
ELSWICK	MIDALE	5.402	9.50	7.40	16.90	0.513	0.400	0.913	0.208	0.705	38.563
FLAT LAKE	RATCLIFFE (NON-UNIT)	0.192	7.50	0.00	7.50	0.014	0.000	0.014	0.007	0.007	0.775
FREESTONE	FROBISHER-ALIDA	2.800	20.80	0.00	20.80	0.582	0.000	0.582	0.432	0.150	23.578
GRIFFIN	FROBISHER	0.455	29.00	0.00	29.00	0.132	0.000	0.132	0.131	0.001	0.917

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ---PER CENT---	AVERAGE CONNATE WATER ---PER CENT---	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
971	4.63	15.7	25.6	1.064	914	1371	JURASSIC	1980	LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)
1586	2.47	15.0	37.5	1.064	923	1371	JURASSIC	1980		SHAUNAVON (NON-UNIT)
1674	3.74	16.2	40.0	1.056	922	1371	JURASSIC	1953	LEON LAKE	SHAUNAVON
770	4.51	26.8	19.9	1.087	914	975	JURASSIC	1952	MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)
364	4.66	32.9	25.0	1.042	968	1006	JURASSIC	1953	NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)
635	4.45	26.7	35.8	1.046	–	1006	JURASSIC	1953		ROSERAY SAND (UNIT NO. 4)
81	3.60	25.1	25.0	1.042	917	1006	JURASSIC	1953		ROSERAY SAND (NON-UNIT)
49	4.57	16.1	25.0	1.111	914	1067	JURASSIC	1953	NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)
291	3.36	18.9	40.0	1.053	–	1067	JURASSIC	1953		UPPER SHAUNAVON (VOLUNTARY UNIT)
1554	2.80	19.0	45.0	1.050	–	1067	JURASSIC	1953		UPPER SHAUNAVON (UNIT NO. 4)
291	4.60	17.3	45.0	1.053	–	1067	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
583	4.58	13.5	25.0	1.064	917	1368	JURASSIC	1969	NOTUKEU	UPPER SHAUNAVON
375	2.10	16.5	55.0	1.053	928	990	JURASSIC	1985	PENNANT	UPPER SHAUNAVON
3400	5.00	15.0	30.0	1.077	914	1402	JURASSIC	1953	RAPDAN	UPPER SHAUNAVON (UNIT)
497	5.06	17.7	5.0	1.064	–	1402	JURASSIC	1953		UPPER SHAUNAVON (N.RAPDAN VOL UNIT)
259	4.14	15.6	28.3	1.080	–	1402	JURASSIC	1953		UPPER SHAUNAVON (VOL UNIT NO. 2)
291	2.94	16.5	5.0	1.064	919	1402	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
1619	2.64	13.3	5.0	1.064	921	1407	JURASSIC	1955	RAPDAN WEST	SHAUNAVON
261	5.66	24.0	30.0	1.075	934	975	JURASSIC	1953	SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)
732	6.07	27.4	23.4	1.089	914	975	JURASSIC	1953		ROSERAY SAND (SUCCESS UNIT)
176	4.60	24.8	22.9	1.075	920	975	JURASSIC	1953	SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)
297	2.39	25.0	37.0	1.077	929	966	JURASSIC	1966	SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)
341	3.23	26.0	29.3	1.078	919	1036	JURASSIC	1954	SUFFIELD	ROSERAY SAND (UNIT NO. 1)
593	2.99	26.0	35.0	1.078	–	1036	JURASSIC	1954		ROSERAY SAND (UNIT NO. 3)
699	3.60	17.6	25.0	1.031	914	1097	JURASSIC	1954	SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)
262	2.28	22.8	36.2	1.080	–	1097	JURASSIC	1954		UPPER SHAUNAVON (UNIT NO. 3)
194	2.67	21.3	25.0	1.031	937	1097	JURASSIC	1954		UPPER SHAUNAVON (NON-UNIT)
898	5.15	27.5	29.1	1.080	920	963	JURASSIC	1956	VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)
1003	4.08	17.8	20.0	1.083	924	1432	JURASSIC	1953	WHITEMUD	SHAUNAVON
65	4.57	20.0	25.0	1.333	–	–	CRETACEOUS	–	MISCELLANEOUS	BASAL MANNVILLE SAND
1327	3.57	23.0	35.0	1.075	–	–	CRETACEOUS	–		CANTUAR SAND
65	2.29	14.8	25.0	1.333	–	–	JURASSIC	–		GRAVELBOURG
75	1.40	30.8	25.0	1.046	–	–	CRETACEOUS	–		PREMIER SAND (N. PREMIER UNIT NO. 2)
1133	4.55	24.4	25.0	1.026	–	–	JURASSIC	–		ROSERAY SAND
518	5.09	14.8	25.0	1.053	–	–	JURASSIC	–		LOWER SHAUNAVON
3448	3.00	17.2	25.0	1.075	–	–	JURASSIC	–		UPPER SHAUNAVON
									AREA IV - MEDIUM	
243	2.26	15.0	30.0	1.124	875	1371	MISSISSIPPIAN	1956	BENSON	MIDALE (NORTHWEST VOL UNIT)
2978	1.80	24.2	30.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (UNIT)
1117	2.77	15.0	40.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (VOLUNTARY UNIT NO. 1)
227	1.60	27.3	30.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (VOLUNTARY UNIT NO. 2)
1682	6.10	12.8	30.0	1.124	886	1371	MISSISSIPPIAN	1956		MIDALE (NON-UNIT)
257	1.70	27.2	22.0	1.124	875	1375	MISSISSIPPIAN	1983	BENSON EAST	MIDALE
615	5.00	13.9	35.0	1.124	903	1693	MISSISSIPPIAN	1985	BROMHEAD	MIDALE
194	4.30	9.1	50.0	1.112	895	1433	MISSISSIPPIAN	1979	BRYANT	FROBISHER
1036	1.80	26.9	46.0	1.125	904	1406	MISSISSIPPIAN	1979	BRYANT	MIDALE
97	12.20	18.7	30.0	1.087	851	1516	MISSISSIPPIAN	1983	COLGATE	MIDALE
1391	5.30	19.7	54.4	1.226	870	1515	MISSISSIPPIAN	1984	ELSWICK	MIDALE
65	8.60	8.1	49.2	1.199	867	1956	MISSISSIPPIAN	1985	FLAT LAKE	RATCLIFFE (NON-UNIT)
712	6.40	12.6	35.0	1.333	879	1160	MISSISSIPPIAN	1953	FREESTONE	FROBISHER-ALIDA
324	2.99	8.4	35.0	1.163	885	1302	MISSISSIPPIAN	1958	GRIFFIN	FROBISHER

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
HANDSWORTH	ALIDA	2.079	24.90	0.00	24.90	0.518	0.000	0.518	0.437	0.081	16.420
HARTAVEN	FROBISHER-ALIDA	0.875	29.80	0.00	29.80	0.261	0.000	0.261	0.120	0.141	10.976
HOFFER	RATCLIFFE	1.268	20.70	0.00	20.70	0.262	0.000	0.262	0.255	0.007	1.279
HUME	FROBISHER	1.361	20.70	0.00	20.70	0.282	0.000	0.282	0.215	0.067	12.853
HUME	MIDALE	1.216	19.30	0.00	19.30	0.235	0.000	0.235	0.164	0.071	7.816
HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)	4.118	10.00	11.80	21.80	0.412	0.486	0.898	0.618	0.280	27.406
HUNTOON	FROBISHER	7.323	8.05	0.00	8.05	0.590	0.000	0.590	0.542	0.048	9.682
HUNTOON	MIDALE (VOL. UNIT NO. 1)	4.443	5.00	3.30	8.30	0.222	0.147	0.369	0.314	0.055	5.195
	MIDALE (VOL. UNIT NO. 2)	0.522	2.00	1.15	3.15	0.010	0.006	0.016	0.011	0.005	1.254
	MIDALE (NON-UNIT)	2.558	4.23	0.00	4.23	0.108	0.000	0.108	0.093	0.015	7.527
INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)	7.933	22.70	0.00	22.70	1.801	0.000	1.801	1.616	0.185	27.860
INNES	FROBISHER	10.417	20.90	0.00	20.90	2.177	0.000	2.177	1.924	0.253	34.809
LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)	2.379	17.00	28.00	45.00	0.404	0.666	1.070	0.726	0.344	21.251
LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)	9.649	23.80	0.00	23.80	2.296	0.000	2.296	2.049	0.247	34.980
	FROBISHER-ALIDA (NON-UNIT)	6.440	21.50	0.00	21.50	1.385	0.000	1.385	0.943	0.442	36.830
LOUGHEED	MIDALE	19.217	9.40	0.00	9.40	1.806	0.000	1.806	0.837	0.969	69.290
MACOUN	MIDALE	1.882	21.20	0.00	21.20	0.399	0.000	0.399	0.310	0.089	9.805
MACOUN WEST	MIDALE	0.793	12.20	0.00	12.20	0.097	0.000	0.097	0.059	0.038	3.431
MELROSE	FROBISHER-ALIDA	1.051	22.36	0.00	22.36	0.235	0.000	0.235	0.142	0.093	7.532
MIDALE	CENTRAL FROBISHER	6.068	16.41	0.00	16.41	0.996	0.000	0.996	0.929	0.067	8.612
MIDALE	CENTRAL MIDALE (S. VOL. UNIT NO. 1)	1.391	4.40	2.50	6.90	0.061	0.035	0.096	0.059	0.037	3.654
	CENTRAL MIDALE (S. VOL. UNIT NO. 2)	2.351	15.50	6.70	22.20	0.364	0.158	0.522	0.287	0.235	4.951
	CENTRAL MIDALE (UNIT)	56.802	16.90	16.70	33.60	9.600	9.486	19.086	16.069	3.017	277.976
	CENTRAL MIDALE (NON-UNIT)	16.287	8.70	0.00	8.70	1.417	0.000	1.417	1.047	0.370	45.501
MINARD	MIDALE	0.879	2.60	0.00	2.60	0.023	0.000	0.023	0.015	0.008	1.896
MOOSE VALLEY	TILSTON	2.101	8.60	0.00	8.60	0.181	0.000	0.181	0.101	0.080	12.503
NEPTUNE	RATCLIFFE	3.857	13.35	0.00	13.35	0.515	0.000	0.515	0.323	0.192	15.971
NORTH HANDSWORTH	ALIDA	2.695	17.18	0.00	17.18	0.463	0.000	0.463	0.346	0.117	11.505
OUNGRE	RATCLIFFE (NON-UNIT)	1.207	10.40	0.00	10.40	0.126	0.000	0.126	0.070	0.056	7.038
RALPH	MIDALE (VOLUNTARY UNIT)	1.041	14.20	2.20	16.40	0.148	0.023	0.171	0.141	0.030	3.075
	MIDALE (NON-UNIT)	0.161	8.70	0.00	8.70	0.014	0.000	0.014	0.010	0.004	1.322
RALPH WEST	MIDALE	2.059	7.53	0.00	7.53	0.155	0.000	0.155	0.046	0.109	20.277
RED JACKET	GRAVELBOURG	0.221	5.40	0.00	5.40	0.012	0.000	0.012	0.007	0.005	0.866
RED JACKET	SHAUNAVON-GRAVELBOURG	2.778	18.10	0.00	18.10	0.503	0.000	0.503	0.152	0.351	31.365
SKINNER LAKE	RATCLIFFE	2.343	4.95	0.00	4.95	0.116	0.000	0.116	0.061	0.055	9.176
STOUGHTON	FROBISHER-ALIDA	0.913	39.60	0.00	39.60	0.362	0.000	0.362	0.336	0.026	3.515
STOUGHTON SOUTH	FROBISHER	1.479	10.80	0.00	10.80	0.160	0.000	0.160	0.123	0.037	3.515
TATAGWA	MIDALE	19.866	4.26	0.00	4.26	0.838	0.000	0.838	0.442	0.396	64.290
TATAGWA NORTH	MIDALE	4.452	2.22	0.00	2.22	0.099	0.000	0.099	0.063	0.036	12.049
VIEWFIELD	FROBISHER (NON-UNIT)	4.496	6.63	0.00	6.63	0.298	0.000	0.298	0.240	0.058	16.715
VIEW HILL	MIDALE	0.449	41.60	0.00	41.60	0.187	0.000	0.187	0.157	0.030	2.388
WAPELLA	WAPELLA SAND	14.481	17.40	0.00	17.40	2.520	0.000	2.520	1.605	0.915	98.069
WEIR HILL	FROBISHER	0.694	8.06	0.00	8.06	0.056	0.000	0.056	0.054	0.002	1.063
WEST INNES	FROBISHER	0.834	23.26	0.00	23.26	0.194	0.000	0.194	0.169	0.025	4.842
WEST KINGSFORD	MIDALE (CULLEN UNIT)	0.882	55.90	0.00	55.90	0.493	0.000	0.493	0.431	0.062	3.759
	MIDALE (NON-UNIT)	2.450	25.20	0.00	25.20	0.617	0.000	0.617	0.547	0.070	8.417
WEYBURN	FROBISHER	9.813	7.40	0.00	7.40	0.726	0.000	0.726	0.550	0.176	23.064
WEYBURN	MIDALE (UNIT)	176.185	13.50	16.60	30.10	23.785	29.247	53.032	44.238	8.796	784.323
	MIDALE (VOLUNTARY UNIT NO. 2)	0.293	6.50	7.50	14.00	0.019	0.022	0.041	0.017	0.024	1.328
	MIDALE (VOLUNTARY UNIT NO. 3)	0.320	6.60	5.00	13.60	0.028	0.016	0.044	0.019	0.025	2.101
	MIDALE (VOLUNTARY UNIT NO. 4)	2.494	3.20	4.80	7.80	0.080	0.115	0.195	0.053	0.142	7.085
	MIDALE (VOLUNTARY UNIT NO. 5)	1.912	6.40	5.50	11.90	0.122	0.105	0.227	0.099	0.128	13.087
	MIDALE (VOLUNTARY UNIT NO. 6)	1.435	6.70	3.20	9.90	0.096	0.046	0.142	0.055	0.087	6.334
	MIDALE (VOLUNTARY UNIT NO. 7)	2.283	9.60	7.50	17.10	0.219	0.171	0.390	0.137	0.253	9.674
	MIDALE (VOLUNTARY UNIT NO. 8)	0.645	4.50	3.40	7.90	0.029	0.022	0.051	0.020	0.031	3.327
	MIDALE (NON-UNIT)	41.025	5.50	0.08	5.58	2.256	0.033	2.289	1.552	0.737	116.059

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	AVERAGE CONNATE WATER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
680	6.60	9.5	35.0	1.333	886	1204	MISSISSIPPIAN	1964	HANDSWORTH	ALIDA
210	5.70	13.7	40.0	1.124	876	1199	MISSISSIPPIAN	1985	HARTAVEN	FROBISHER-ALIDA
275	6.20	14.3	35.0	1.250	869	1935	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE
437	6.65	8.1	35.0	1.124	883	1350	MISSISSIPPIAN	1967	HUME	FROBISHER
718	2.90	10.1	35.0	1.124	889	1332	MISSISSIPPIAN	1968	HUME	MIDALE
442	10.71	14.0	30.8	1.117	870	1890	MISSISSIPPIAN	1966	HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)
1407	9.00	10.0	35.0	1.124	892	1372	MISSISSIPPIAN	1957	HUNTOON	FROBISHER
1230	3.47	18.0	35.0	1.124	874	1359	MISSISSIPPIAN	1957	HUNTOON	MIDALE (VOL. UNIT NO. 1)
162	5.70	12.7	50.0	1.124	875	1371	MISSISSIPPIAN	1957		MIDALE (VOL. UNIT NO. 2)
971	5.30	8.6	35.0	1.124	880	1371	MISSISSIPPIAN	1957		MIDALE (NON-UNIT)
1165	10.50	10.7	30.0	1.155	876	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)
2071	10.00	9.0	35.0	1.163	891	1333	MISSISSIPPIAN	1965	INNES	FROBISHER
437	4.24	23.5	40.0	1.098	874	1981	MISSISSIPPIAN	1965	LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)
583	20.95	15.7	45.0	1.093	848	1174	MISSISSIPPIAN	1963	LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)
855	10.30	13.7	40.0	1.124	897	1174	MISSISSIPPIAN	1963		FROBISHER-ALIDA (NON-UNIT)
1845	8.30	21.7	35.0	1.124	873	1407	MISSISSIPPIAN	1959	LOUGHEED	MIDALE
825	3.71	11.0	35.0	1.163	895	1531	MISSISSIPPIAN	1969	MACOUN	MIDALE
259	7.44	8.7	45.0	1.163	888	1559	MISSISSIPPIAN	1970	MACOUN WEST	MIDALE
194	7.58	14.6	45.0	1.124	878	1169	MISSISSIPPIAN	1963	MELROSE	FROBISHER-ALIDA
1780	7.90	9.7	50.0	1.124	881	1411	MISSISSIPPIAN	1953	MIDALE	CENTRAL FROBISHER
259	7.03	14.7	41.6	1.124	883	1340	MISSISSIPPIAN	1953	MIDALE	CENTRAL MIDALE (S. VOL. UNIT NO. 1)
324	5.50	22.1	32.9	1.124	883	1340	MISSISSIPPIAN	1953		CENTRAL MIDALE (S. VOL. UNIT NO. 2)
12335	5.24	16.3	39.4	1.124	877	1402	MISSISSIPPIAN	1953		CENTRAL MIDALE (UNIT)
3995	4.00	17.9	36.0	1.124	883	1402	MISSISSIPPIAN	1953		CENTRAL MIDALE (NON-UNIT)
259	2.93	26.0	45.0	1.234	905	1340	MISSISSIPPIAN	1956	MINARD	MIDALE
291	10.98	12.2	40.0	1.111	909	1183	MISSISSIPPIAN	1956	MOOSE VALLEY	TILSTON
1004	4.85	18.0	45.0	1.111	910	1784	MISSISSIPPIAN	1967	NEPTUNE	RATCLIFFE
825	6.70	10.0	35.0	1.333	885	1176	MISSISSIPPIAN	1965	NORTH HANDSWORTH	ALIDA
502	2.80	19.2	45.0	1.230	878	1828	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (NON-UNIT)
680	3.90	10.0	55.9	1.124	863	1315	MISSISSIPPIAN	1973	RALPH	MIDALE (VOLUNTARY UNIT)
97	3.85	11.0	55.9	1.124	863	1315	MISSISSIPPIAN	1973		MIDALE (NON-UNIT)
583	7.63	11.8	55.9	1.124	860	1295	MISSISSIPPIAN	1985	RALPH WEST	MIDALE
32	3.60	31.0	38.0	1.003	930	735	JURASSIC	1985	RED JACKET	GRAVELBOURG
243	6.60	27.8	37.5	1.003	948	665	JURASSIC	1984	RED JACKET	SHAUNAVON-GRAVELBOURG
648	4.00	18.3	45.0	1.111	893	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
388	4.30	9.8	35.0	1.164	882	1268	MISSISSIPPIAN	1960	STOUGHTON	FROBISHER-ALIDA
502	8.20	7.6	45.0	1.163	892	1265	MISSISSIPPIAN	1974	STOUGHTON SOUTH	FROBISHER
1440	11.23	20.3	35.0	1.085	904	1478	MISSISSIPPIAN	1977	TATAGWA	MIDALE
437	9.92	16.5	25.0	1.205	900	1470	MISSISSIPPIAN	1983	TATAGWA NORTH	MIDALE
826	10.01	10.7	35.0	1.279	872	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (NON-UNIT)
162	5.61	11.1	50.0	1.124	885	1539	MISSISSIPPIAN	1959	VIEW HILL	MIDALE
1278	5.86	27.9	30.0	1.010	906	701	CRET.-JURASSIC	1952	WAPELLA	WAPELLA SAND
129	10.21	10.8	35.0	1.333	871	1353	MISSISSIPPIAN	1968	WEIR HILL	FROBISHER
291	5.40	9.5	35.0	1.163	893	1335	MISSISSIPPIAN	1965	WEST INNES	FROBISHER
291	5.36	10.4	35.0	1.196	895	1485	MISSISSIPPIAN	1955	WEST KINGSFORD	MIDALE (CULLEN UNIT)
712	5.50	11.6	35.0	1.205	882	1485	MISSISSIPPIAN	1955		MIDALE (NON-UNIT)
2007	7.10	12.9	40.0	1.124	876	1417	MISSISSIPPIAN	1954	WEYBURN	FROBISHER
21529	7.83	17.2	31.7	1.124	880	1399	MISSISSIPPIAN	1954	WEYBURN	MIDALE (UNIT)
129	3.60	12.8	44.0	1.135	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 2)
65	4.70	18.0	33.0	1.150	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 3)
1100	4.90	10.4	50.0	1.124	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 4)
356	6.80	15.6	40.0	1.150	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 5)
259	6.56	14.6	35.0	1.124	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 6)
1004	3.60	12.8	44.0	1.135	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 7)
162	5.30	13.0	35.0	1.124	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 8)
6052	6.42	17.2	31.0	1.124	877	1405	MISSISSIPPIAN	1954		MIDALE (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
MISCELLANEOUS	ALIDA	2.301	8.00	0.00	8.00	0.184	0.000	0.184	0.069	0.115	13.025
	BAKKEN	0.969	4.70	0.00	4.70	0.046	0.000	0.046	0.014	0.032	4.986
	BIRDBEAR	0.502	8.20	0.00	8.20	0.041	0.000	0.041	0.024	0.017	2.088
	FROBISHER	5.043	11.10	0.00	11.10	0.560	0.000	0.560	0.345	0.215	35.948
	FROBISHER-ALIDA	1.668	5.50	0.00	5.50	0.092	0.000	0.092	0.031	0.061	10.534
	GRAVELBOURG	0.178	23.00	0.00	23.00	0.041	0.000	0.041	0.032	0.009	1.287
	JURASSIC	4.042	6.20	0.00	6.20	0.251	0.000	0.251	0.167	0.084	14.082
	MANNVILLE	1.388	3.30	0.00	3.30	0.046	0.000	0.046	0.006	0.040	3.675
	MIDALE	24.406	3.30	0.00	3.30	0.805	0.000	0.805	0.429	0.376	65.486
	RATCLIFFE	4.105	10.60	0.00	10.60	0.435	0.000	0.435	0.267	0.168	18.901
	WAPELLA	0.057	7.00	0.00	7.00	0.004	0.000	0.004	0.003	0.001	1.225
	TOTAL AREA IV MEDIUM	**555.812**				**67.377**	**43.584**	**110.961**	**87.245**	**23.716**	**2379.830**
AREA IV - LIGHT											
ALAMEDA	MIDALE (CENTRAL UNIT)	1.162	11.70	29.00	40.70	0.136	0.337	0.473	0.401	0.072	8.221
	MIDALE (EAST UNIT)	4.848	16.00	22.00	38.00	0.776	1.067	1.843	1.569	0.274	23.418
	MIDALE (NORTH UNIT)	1.000	12.00	16.60	28.60	0.120	0.166	0.286	0.263	0.023	2.694
	MIDALE (SOUTH UNIT)	1.792	13.30	13.20	26.50	0.238	0.237	0.475	0.430	0.045	5.847
	MIDALE (NON-UNIT)	3.663	7.67	0.00	7.67	0.281	0.000	0.281	0.239	0.042	15.218
ALAMEDA WEST	FROBISHER	0.151	0.20	0.00	0.20	0.000	0.000	0.000	0.000	0.000	0.000
ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO. 1)	0.771	5.00	2.91	7.91	0.039	0.022	0.061	0.041	0.020	3.134
	MIDALE (NON-UNIT)	0.122	1.50	0.00	1.50	0.002	0.000	0.002	0.002	0.000	0.213
ALIDA EAST	FROBISHER-ALIDA (UNIT)	11.208	26.70	0.00	26.70	2.993	0.000	2.993	2.046	0.947	56.703
	FROBISHER-ALIDA (NON-UNIT)	0.419	8.67	0.00	8.67	0.036	0.000	0.036	0.035	0.001	0.026
ALIDA NORTH	ALIDA	1.050	23.30	0.00	23.30	0.245	0.000	0.245	0.140	0.105	9.739
ALIDA WEST	FROBISHER-ALIDA	8.854	31.50	0.00	31.50	2.789	0.000	2.789	2.002	0.787	85.259
ARCOLA	FROBISHER-ALIDA	9.024	20.50	0.00	20.50	1.850	0.000	1.850	1.165	0.685	67.730
AUBURNTON	FROBISHER-ALIDA	0.199	5.00	0.00	5.00	0.010	0.000	0.010	0.010	0.000	1.111
BENSON	FROBISHER	2.309	5.38	0.00	5.38	0.124	0.000	0.124	0.081	0.043	9.189
BIENFAIT	MIDALE	3.332	14.30	0.00	14.30	0.476	0.000	0.476	0.268	0.208	24.726
BROWNING	FROBISHER-ALIDA	3.835	17.16	0.00	17.16	0.658	0.000	0.658	0.569	0.089	13.332
CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)	0.185	38.20	0.00	38.20	0.071	0.000	0.071	0.056	0.015	1.560
	FROBISHER-ALIDA (NON-UNIT)	4.699	8.00	0.00	8.00	0.376	0.000	0.376	0.290	0.086	36.348
CANTAL SOUTH	FROBISHER-ALIDA	3.411	23.40	0.00	23.40	0.798	0.000	0.798	0.741	0.057	8.186
CARNDUFF	FROBISHER	5.091	11.84	0.00	11.84	0.603	0.000	0.603	0.551	0.052	7.804
CARNDUFF	MIDALE (EAST UNIT)	8.421	15.00	23.40	38.40	1.263	1.971	3.234	2.777	0.457	27.705
	MIDALE (SOUTH VOL UNIT)	1.089	10.00	1.50	11.50	0.109	0.016	0.125	0.093	0.032	4.564
	MIDALE (WEST UNIT)	3.421	13.00	30.50	43.50	0.445	1.043	1.488	1.446	0.042	9.819
	MIDALE (VOLUNTARY UNIT NO. 1)	0.433	14.20	17.20	31.40	0.061	0.074	0.135	0.071	0.064	6.070
	MIDALE (NON-UNIT)	1.799	7.50	6.10	13.60	0.135	0.110	0.245	0.182	0.063	8.089
CLARILAW	FROBISHER-ALIDA	0.631	23.20	0.00	23.20	0.146	0.000	0.146	0.115	0.031	4.150
CLAIRLAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)	0.621	33.50	0.00	33.50	0.208	0.000	0.208	0.141	0.067	9.964
	FROBISHER-ALIDA (NON-UNIT)	0.279	9.04	0.00	9.04	0.025	0.000	0.025	0.016	0.009	2.462
CRYSTAL HILL	SOURIS VALLEY	0.705	14.80	0.00	14.80	0.104	0.000	0.104	0.089	0.015	3.810
DALESBORO	FROBISHER-ALIDA	0.099	29.90	0.00	29.90	0.030	0.000	0.030	0.029	0.001	0.428
EDENVALE	TILSTON	1.915	5.27	0.00	5.27	0.101	0.000	0.101	0.083	0.018	2.895
ELMORE	FROBISHER (VOLUNTARY UNIT)	5.019	26.00	12.90	40.90	1.405	0.647	2.052	1.809	0.243	27.311
	FROBISHER (NON-UNIT)	0.871	5.50	0.00	5.50	0.048	0.000	0.048	0.031	0.017	1.622
ELMORE	MIDALE	0.292	24.10	0.00	24.10	0.070	0.000	0.070	0.068	0.002	0.898
FERTILE	TILSTON	0.265	6.00	0.00	6.00	0.016	0.000	0.016	0.013	0.003	1.092
FERTILE	TILSTON-SOURIS VALLEY	0.369	2.70	0.00	2.70	0.010	0.000	0.010	0.009	0.001	0.209
FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	8.172	10.00	19.60	29.60	0.817	1.602	2.419	1.707	0.712	44.197
	RATCLIFFE (VOLUNTARY UNIT NO. 2)	1.067	4.70	3.60	8.30	0.050	0.038	0.088	0.022	0.066	2.812
	RATCLIFFE (NON-UNIT)	0.791	2.90	0.00	2.90	0.023	0.000	0.023	0.009	0.014	1.881

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
356	9.40	14.1	35.0	1.333	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
97	13.90	10.2	25.0	1.064	–	–	MISSISSIPPIAN	–		BAKKEN
162	3.60	13.5	25.0	1.176	–	–	DEVONIAN	–		BIRDBEAR
2039	5.92	9.1	48.4	1.124	–	–	MISSISSIPPIAN	–		FROBISHER
388	6.28	14.3	36.2	1.333	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA
16	6.00	25.0	25.0	1.010	–	–	JURASSIC	–		GRAVELBOURG
324	6.56	27.6	30.4	1.010	–	–	JURASSIC	–		JURASSIC
97	6.53	29.5	25.0	1.010	–	–	CRETACEOUS	–		MANNVILLE
3139	9.34	17.2	45.8	1.124	–	–	MISSISSIPPIAN	–		MIDALE
938	6.41	14.0	35.0	1.333	–	–	MISSISSIPPIAN	–		RATCLIFFE
11	2.50	28.0	25.0	1.010	–	–	CRET.-JURASSIC	–		WAPELLA
									AREA IV - LIGHT	
680	2.53	16.3	43.0	1.378	823	1347	MISSISSIPPIAN	1956	ALAMEDA	MIDALE (CENTRAL UNIT)
2363	2.77	17.2	41.0	1.370	826	1347	MISSISSIPPIAN	1956		MIDALE (EAST UNIT)
421	3.44	16.6	43.0	1.370	–	1347	MISSISSIPPIAN	1956		MIDALE (NORTH UNIT)
906	3.35	14.5	45.0	1.351	–	1347	MISSISSIPPIAN	1956		MIDALE (SOUTH UNIT)
1829	4.30	11.0	42.0	1.370	842	1347	MISSISSIPPIAN	1956		MIDALE (NON-UNIT)
32	11.00	8.8	35.0	1.333	844	1381	MISSISSIPPIAN	1982	ALAMEDA WEST	FROBISHER
181	8.94	11.7	45.0	1.351	843	1356	MISSISSIPPIAN	1982	ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO. 1)
32	8.00	11.7	45.0	1.351	–	1356	MISSISSIPPIAN	1982		MIDALE (NON-UNIT)
1619	7.99	18.5	30.0	1.333	824	1122	MISSISSIPPIAN	1954	ALIDA EAST	FROBISHER-ALIDA (UNIT)
65	7.92	16.7	35.0	1.333	–	1122	MISSISSIPPIAN	1954		FROBISHER-ALIDA (NON-UNIT)
129	10.20	15.2	30.0	1.333	836	1143	MISSISSIPPIAN	1982	ALIDA NORTH	ALIDA
923	12.90	14.0	31.0	1.299	836	1143	MISSISSIPPIAN	1955	ALIDA WEST	FROBISHER-ALIDA
1117	10.90	15.2	35.0	1.333	854	1199	MISSISSIPPIAN	1964	ARCOLA	FROBISHER-ALIDA
65	5.10	12.3	35.0	1.333	832	1197	MISSISSIPPIAN	1985	AUBURNTON	FROBISHER-ALIDA
340	12.25	8.9	30.0	1.124	832	1197	MISSISSIPPIAN	1985	BENSON	FROBISHER
550	12.60	8.7	35.0	1.176	852	1589	MISSISSIPPIAN	1980	BIENFAIT	MIDALE
631	12.10	10.3	35.0	1.333	853	1280	MISSISSIPPIAN	1957	BROWNING	FROBISHER-ALIDA
97	5.90	8.9	35.0	1.389	823	1196	MISSISSIPPIAN	1958	CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)
712	10.10	13.4	35.0	1.333	834	1196	MISSISSIPPIAN	1958		FROBISHER-ALIDA (NON-UNIT)
696	15.00	6.7	35.0	1.333	828	1135	MISSISSIPPIAN	1958	CANTAL SOUTH	FROBISHER-ALIDA
955	8.22	13.3	35.0	1.333	854	1298	MISSISSIPPIAN	1958	CARNDUFF	FROBISHER
5568	2.00	14.4	30.0	1.333	844	1280	MISSISSIPPIAN	1955	CARNDUFF	MIDALE (EAST UNIT)
680	2.50	12.2	30.0	1.333	339	1280	MISSISSIPPIAN	1955		MIDALE (SOUTH VOL UNIT)
2104	2.40	12.9	30.0	1.333	844	1280	MISSISSIPPIAN	1955		MIDALE (WEST UNIT)
223	2.70	13.7	30.0	1.333	–	1280	MISSISSIPPIAN	1955		MIDALE (VOLUNTARY UNIT NO. 1)
640	5.29	10.9	35.0	1.333	835	1280	MISSISSIPPIAN	1955		MIDALE (NON-UNIT)
259	4.27	11.7	35.0	1.333	858	1231	MISSISSIPPIAN	1963	CLARILAW	FROBISHER-ALIDA
194	5.40	11.4	35.0	1.250	843	1234	MISSISSIPPIAN	1963	CLARILAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)
65	8.50	9.7	35.0	1.250	–	1234	MISSISSIPPIAN	1963		FROBISHER-ALIDA (NON-UNIT)
243	5.86	9.2	40.0	1.111	861	1113	MISSISSIPPIAN	1966	CRYSTAL HILL	SOURIS VALLEY
32	5.40	11.8	35.0	1.333	853	1262	MISSISSIPPIAN	1966	DALESBORO	FROBISHER-ALIDA
356	7.97	12.5	40.0	1.111	853	1126	MISSISSIPPIAN	1963	EDENVALE	TILSTON
874	7.00	15.9	40.0	1.163	871	1219	MISSISSIPPIAN	1961	ELMORE	FROBISHER (VOLUNTARY UNIT)
194	8.96	10.6	45.0	1.163	875	1219	MISSISSIPPIAN	1961		FROBISHER (NON-UNIT)
194	2.71	11.4	35.0	1.333	841	1204	MISSISSIPPIAN	1981	ELMORE	MIDALE
49	6.87	14.6	40.0	1.111	860	953	MISSISSIPPIAN	1983	FERTILE	TILSTON
65	9.15	11.5	40.0	1.111	860	953	MISSISSIPPIAN	1956	FERTILE	TILSTON-SOURIS VALLEY
2428	5.64	14.1	49.0	1.205	885	1956	MISSISSIPPIAN	1965	FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
259	6.60	15.3	49.0	1.250	850	1956	MISSISSIPPIAN	1965		RATCLIFFE (VOLUNTARY UNIT NO. 2)
194	8.00	9.8	35.0	1.250	848	1956	MISSISSIPPIAN	1965		RATCLIFFE (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
FLORENCE	FROBISHER	1.070	11.00	0.00	11.00	0.118	0.000	0.118	0.115	0.003	0.985
FREDA LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	7.327	11.50	6.30	17.80	0.843	0.462	1.305	0.595	0.710	35.414
	RATCLIFFE (NON-UNIT)	1.692	8.50	0.00	8.50	0.144	0.000	0.144	0.074	0.070	9.959
FRYS	TILSTON-SOURIS VALLEY	2.601	5.80	0.00	5.80	0.151	0.000	0.151	0.123	0.028	4.497
FRYS EAST	TILSTON-SOURIS VALLEY	1.036	3.90	0.00	3.90	0.040	0.000	0.040	0.032	0.008	3.392
GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)	1.090	10.00	5.30	15.30	0.109	0.058	0.167	0.139	0.028	2.337
	FROBISHER-ALIDA (NON-UNIT)	3.940	5.20	0.00	5.20	0.205	0.000	0.205	0.148	0.057	8.129
GAINSBOROUGH NORTH	FROBISHER-ALIDA	5.864	23.20	0.00	23.20	1.360	0.000	1.360	0.101	1.259	73.941
GLEN EWEN	FROBISHER	1.984	16.50	0.00	16.50	0.327	0.000	0.327	0.196	0.131	14.286
GLEN EWEN	MIDALE (UNIT)	5.989	13.00	5.40	18.40	0.779	0.323	1.102	1.023	0.079	10.156
	MIDALE (NON-UNIT)	0.478	6.30	0.00	6.30	0.030	0.000	0.030	0.027	0.003	0.841
HASTINGS	FROBISHER (UNIT)	2.370	28.60	2.40	31.00	0.678	0.057	0.735	0.706	0.029	6.435
	FROBISHER (VOL UNIT NO. 1)	4.702	17.00	6.10	25.10	0.799	0.381	1.180	1.114	0.066	14.202
	FROBISHER (VOL UNIT NO. 2)	5.705	11.00	3.00	14.00	0.628	0.171	0.799	0.787	0.012	5.104
	FROBISHER (NON-UNIT)	17.512	13.10	0.00	13.10	2.294	0.000	2.294	1.912	0.382	60.636
HASTINGS EAST	FROBISHER	3.863	13.20	0.00	13.20	0.510	0.000	0.510	0.262	0.248	33.673
HASTINGS WEST	FROBISHER	1.385	8.20	0.00	8.20	0.114	0.000	0.114	0.046	0.068	10.032
HAZELWOOD	TILSTON	2.196	13.00	0.00	13.00	0.285	0.000	0.285	0.213	0.072	17.562
HAZELWOOD SOUTH	TILSTON	1.798	13.90	0.00	13.90	0.250	0.000	0.250	0.041	0.209	15.630
HAZELWOOD WEST	TILSTON	0.600	30.00	0.00	30.00	0.180	0.000	0.180	0.065	0.115	11.752
HOFFER	RATCLIFFE	2.503	11.00	0.00	11.00	0.275	0.000	0.275	0.197	0.078	12.200
HUMMINGBIRD	BAKKEN	0.525	29.50	0.00	29.50	0.155	0.000	0.155	0.053	0.102	11.479
HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)	1.187	42.80	0.00	42.80	0.499	0.000	0.499	0.462	0.037	5.947
INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)	6.242	42.10	0.00	42.10	2.628	0.000	2.628	2.295	0.333	32.040
	FROBISHER-ALIDA (NON-UNIT)	2.840	12.00	0.00	12.00	0.341	0.000	0.341	0.167	0.174	15.587
INGOLDSBY WEST	FROBISHER-ALIDA	0.877	9.60	0.00	9.60	0.085	0.000	0.085	0.025	0.040	4.726
KENOSEE	TILSTON (VOLUNTARY UNIT)	4.044	60.60	0.00	60.60	2.451	0.000	2.451	2.012	0.439	37.683
KISBEY	BIRDBEAR	1.350	20.50	0.00	20.50	0.277	0.000	0.277	0.178	0.099	14.396
KISBEY	FROBISHER-ALIDA	6.240	10.30	0.00	10.30	0.643	0.000	0.643	0.155	0.488	67.578
LIGHTNING	TILSTON	0.756	7.30	0.00	7.30	0.055	0.000	0.055	0.053	0.002	2.340
MOOSE MOUNTAIN	TILSTON	4.394	20.10	0.00	20.10	0.883	0.000	0.883	0.622	0.261	32.754
MORRISVIEW	FROBISHER-ALIDA	0.674	29.70	0.00	29.70	0.200	0.000	0.200	0.187	0.013	4.328
NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)	0.757	8.00	4.90	12.90	0.061	0.037	0.098	0.098	0.000	0.000
NORTHGATE	FROBISHER	0.838	10.20	0.00	10.20	0.085	0.000	0.085	0.051	0.034	4.951
NORTHGATE	MIDALE (VOLUNTARY UNIT)	3.217	8.70	0.80	9.50	0.280	0.026	0.306	0.269	0.037	8.531
	MIDALE (NON UNIT)	0.036	24.70	0.00	24.70	0.009	0.000	0.009	0.008	0.001	0.538
NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)	9.423	20.90	0.00	20.90	1.969	0.000	1.969	1.541	0.428	26.421
	ALIDA (NON-UNIT)	2.300	41.10	0.00	41.10	0.945	0.000	0.945	0.849	0.096	12.630
OAKLEY	FROBISHER	0.572	21.40	0.00	21.40	0.122	0.000	0.122	0.112	0.010	1.677
OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	14.470	8.00	8.20	16.20	1.158	1.187	2.345	1.252	1.093	50.990
	RATCLIFFE (NON-UNIT)	0.889	22.90	0.00	22.90	0.204	0.000	0.204	0.092	0.112	9.330
PARKMAN	SOURIS VALLEY	3.843	7.23	0.00	7.23	0.278	0.000	0.278	0.207	0.071	12.312
PARKMAN	TILSTON	2.077	13.90	0.00	13.90	0.289	0.000	0.289	0.189	0.100	17.271
PARKMAN	TILSTON-SOURIS VALLEY	32.328	14.50	0.00	14.50	4.688	0.000	4.688	3.587	1.101	116.847
PARKMAN SOUTH	TILSTON-SOURIS VALLEY	2.238	8.00	0.00	8.00	0.179	0.000	0.179	0.127	0.052	4.332
PINTO	FROBISHER	1.192	37.80	0.00	37.80	0.451	0.000	0.451	0.426	0.025	10.056
PINTO	MIDALE (SOUTH PINTO UNIT)	5.030	10.40	4.30	14.70	0.523	0.216	0.739	0.618	0.121	8.027
	MIDALE (NON-UNIT)	18.671	4.12	0.00	4.12	0.769	0.000	0.769	0.647	0.122	34.976
QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)	2.322	45.60	0.00	45.60	1.059	0.000	1.059	0.974	0.085	12.317
	FROBISHER-ALIDA (NON-UNIT)	15.080	49.10	0.00	49.10	7.409	0.000	7.409	4.936	2.473	195.795
QUEENSDALE NORTH	ALIDA	1.576	21.10	0.00	21.10	0.333	0.000	0.333	0.256	0.077	10.481
QUEENSDALE WEST	ALIDA	2.641	32.70	0.00	32.70	0.864	0.000	0.864	0.747	0.117	13.812
ROCANVILLE	BAKKEN SAND (VOL UNIT NO. 1)	1.809	22.75	5.22	27.97	0.368	0.084	0.450	0.260	0.190	7.984
	BAKKEN SAND (NON-UNIT)	0.717	12.00	0.00	12.00	0.086	0.000	0.086	0.070	0.016	3.425
RONCOTT	BAKKEN SAND	1.037	10.40	0.00	10.40	0.108	0.000	0.108	0.104	0.004	1.388

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
292	6.37	11.8	35.0	1.333	843	1290	MISSISSIPPIAN	1965	FLORENCE	FROBISHER
2655	2.30	23.7	43.5	1.116	870	1290	MISSISSIPPIAN	1965	FREDA LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
358	4.21	21.0	40.0	1.116	870	1694	MISSISSIPPIAN	1967		RATCLIFFE (NON-UNIT)
291	12.73	13.0	40.0	1.111	846	974	MISSISSIPPIAN	1958	FRYS	TILSTON-SOURIS VALLEY
113	13.91	12.2	40.0	1.111	846	974	MISSISSIPPIAN	1964	FRYS EAST	TILSTON-SOURIS VALLEY
243	6.40	11.5	30.0	1.149	858	1072	MISSISSIPPIAN	1956	GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)
648	7.92	12.8	30.0	1.149	865	1072	MISSISSIPPIAN	1956		FROBISHER-ALIDA (NON-UNIT)
814	9.33	12.1	30.0	1.097	865	1077	MISSISSIPPIAN	1987	GAINSBOROUGH NORTH	FROBISHER-ALIDA
583	6.23	11.2	35.0	1.333	818	1304	MISSISSIPPIAN	1954	GLEN EWEN	FROBISHER
4209	2.13	13.7	35.0	1.333	828	1280	MISSISSIPPIAN	1954	GLEN EWEN	MIDALE (UNIT)
146	4.80	14.0	35.0	1.333	826	1280	MISSISSIPPIAN	1954		MIDALE (NON-UNIT)
502	6.49	14.8	37.0	1.282	833	1200	MISSISSIPPIAN	1955	HASTINGS	FROBISHER (UNIT)
1105	6.37	13.7	35.0	1.333	–	1200	MISSISSIPPIAN	1955		FROBISHER (VOL UNIT NO. 1)
971	6.10	19.6	37.0	1.282	843	1200	MISSISSIPPIAN	1955		FROBISHER (VOL UNIT NO. 2)
3253	10.40	11.5	40.0	1.333	842	1200	MISSISSIPPIAN	1955		FROBISHER (NON-UNIT)
1102	8.17	8.8	35.0	1.333	837	1147	MISSISSIPPIAN	1956	HASTINGS EAST	FROBISHER
490	5.47	10.6	35.0	1.333	837	1147	MISSISSIPPIAN	1963	HASTINGS WEST	FROBISHER
292	11.05	12.6	40.0	1.111	848	1149	MISSISSIPPIAN	1963	HAZELWOOD	TILSTON
320	7.38	14.1	40.0	1.111	848	1198	MISSISSIPPIAN	1958	HAZELWOOD SOUTH	TILSTON
115	6.44	15.0	40.0	1.111	848	1179	MISSISSIPPIAN	1983	HAZELWOOD WEST	TILSTON
663	6.80	11.0	35.0	1.250	878	1931	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE
162	4.94	9.3	25.0	1.064	825	2226	MISSISSIPPIAN	1966	HUMMINGBIRD	BAKKEN
209	9.05	10.3	28.7	1.190	830	2326	DEVONIAN	1966	HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)
907	8.69	13.0	30.0	1.149	865	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)
453	9.44	10.9	30.0	1.149	850	1089	MISSISSIPPIAN	1955		FROBISHER-ALIDA (NON-UNIT)
97	11.30	9.8	30.0	1.111	850	1096	MISSISSIPPIAN	1986	INGOLDSBY WEST	FROBISHER-ALIDA
996	4.88	18.0	35.0	1.250	848	1196	MISSISSIPPIAN	1958	KENOSEE	TILSTON (VOLUNTARY UNIT)
211	8.48	12.0	25.0	1.190	845	1626	DEVONIAN	1968	KISBEY	BIRDBEAR
729	9.45	15.3	28.0	1.250	840	1195	MISSISSIPPIAN	1985	KISBEY	FROBISHER-ALIDA
227	4.50	13.7	40.0	1.111	843	1058	MISSISSIPPIAN	1957	LIGHTNING	TILSTON
566	10.70	13.0	40.0	1.075	864	1188	MISSISSIPPIAN	1960	MOOSE MOUNTAIN	TILSTON
210	4.54	13.6	35.0	1.250	843	1266	MISSISSIPPIAN	1967	MORRISVIEW	FROBISHER-ALIDA
233	5.46	12.2	35.0	1.333	827	1152	MISSISSIPPIAN	1965	NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)
356	5.61	8.6	35.0	1.333	843	1585	MISSISSIPPIAN	1963	NORTHGATE	FROBISHER
1456	4.84	15.6	55.0	1.538	836	1575	MISSISSIPPIAN	1963	NORTHGATE	MIDALE (VOLUNTARY UNIT)
16	3.84	14.3	45.0	1.333	837	1575	MISSISSIPPIAN	1963		MIDALE (NON UNIT)
1182	9.14	16.9	31.2	1.333	839	1066	MISSISSIPPIAN	1956	NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)
372	7.78	15.4	31.2	1.333	846	1066	MISSISSIPPIAN	1956		ALIDA (NON-UNIT)
210	5.55	10.9	40.0	1.333	841	1196	MISSISSIPPIAN	1955	OAKLEY	FROBISHER
2784	6.52	17.9	45.0	1.235	878	1828	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
275	4.10	17.7	45.0	1.235	878	1828	MISSISSIPPIAN	1959		RATCLIFFE (NON-UNIT)
809	11.23	9.4	50.0	1.111	871	1188	MISSISSIPPIAN	1964	PARKMAN	SOURIS VALLEY
291	11.20	11.8	40.0	1.111	870	1060	MISSISSIPPIAN	1958	PARKMAN	TILSTON
3220	16.90	11.0	40.0	1.111	882	1097	MISSISSIPPIAN	1959	PARKMAN	TILSTON-SOURIS VALLEY
226	13.10	14.0	40.0	1.111	841	1096	MISSISSIPPIAN	1969	PARKMAN SOUTH	TILSTON-SOURIS VALLEY
664	4.58	9.5	45.0	1.333	848	1631	MISSISSIPPIAN	1957	PINTO	FROBISHER
2525	4.40	12.9	45.0	1.567	873	1615	MISSISSIPPIAN	1957	PINTO	MIDALE (SOUTH PINTO UNIT)
4128	8.51	10.9	35.0	1.333	834	1615	MISSISSIPPIAN	1957		MIDALE (NON-UNIT)
437	10.80	8.9	35.0	1.178	843	1173	MISSISSIPPIAN	1956	QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)
2573	8.10	13.1	35.0	1.178	850	1173	MISSISSIPPIAN	1956		FROBISHER-ALIDA (NON-UNIT)
275	7.30	16.1	35.0	1.333	851	1174	MISSISSIPPIAN	1959	QUEENSDALE NORTH	ALIDA
486	9.95	11.2	35.0	1.333	859	1204	MISSISSIPPIAN	1956	QUEENSDALE WEST	ALIDA
227	5.30	21.6	35.0	1.050	843	715	MISSISSIPPIAN	1957	ROCANVILLE	BAKKEN SAND (VOL UNIT NO. 1)
129	6.03	18.9	35.0	1.333	843	715	MISSISSIPPIAN	1957		BAKKEN SAND (NON-UNIT)
227	4.50	14.4	25.0	1.064	823	1822	MISSISSIPPIAN	1956	RONCOTT	BAKKEN SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
ROSEBANK	ALIDA (VOL UNIT NO. 1)	8.732	46.50	0.00	46.50	4.060	0.000	4.060	3.614	0.446	31.887
	ALIDA (NON-UNIT)	9.823	14.00	0.00	14.00	1.375	0.000	1.375	1.099	0.276	29.705
ROSEBANK SOUTH	ALIDA	1.871	20.30	0.00	20.30	0.380	0.000	0.380	0.180	0.200	20.300
SHERWOOD	FROBISHER	4.295	45.40	0.00	45.40	1.950	0.000	1.950	1.754	0.196	24.541
SILVERTON	FROBISHER	0.793	10.36	0.00	10.36	0.082	0.000	0.082	0.080	0.002	1.145
SKINNER LAKE	RATCLIFFE	3.885	15.70	0.00	15.70	0.610	0.000	0.610	0.305	0.305	18.752
SOURIS FLAT	FROBISHER	2.817	25.60	0.00	25.60	0.721	0.000	0.721	0.616	0.105	11.774
SOUTH FLETWODE	TILSTON	1.339	39.20	0.00	39.20	0.525	0.000	0.525	0.467	0.058	9.980
STAR VALLEY	FROBISHER-ALIDA	4.917	42.50	0.00	42.50	2.090	0.000	2.090	1.482	0.608	59.725
STEELMAN	FROBISHER (VOL UNIT NO. 1)	0.907	30.82	0.00	30.82	0.280	0.000	0.280	0.265	0.015	2.776
	FROBISHER (DOUGLASTON UNIT)	0.850	25.45	0.00	25.45	0.216	0.000	0.216	0.207	0.009	1.502
	FROBISHER (NON-UNIT)	15.565	12.40	0.00	12.40	1.930	0.000	1.930	1.758	0.172	47.759
STEELMAN	MIDALE (UNIT IA)	18.404	16.00	32.20	48.20	2.945	5.926	8.871	8.505	0.366	64.703
	MIDALE (UNIT II)	16.648	23.00	31.90	54.90	3.829	5.311	9.140	7.997	1.143	80.149
	MIDALE (UNIT III)	11.465	16.00	26.10	42.10	1.834	2.992	4.826	4.188	0.638	63.057
	MIDALE (UNIT IV)	13.402	15.00	26.60	41.60	2.010	3.565	5.575	5.053	0.522	71.623
	MIDALE (UNIT V)	6.555	15.00	11.50	26.50	0.983	0.754	1.737	1.659	0.078	12.630
	MIDALE (UNIT VI)	24.826	16.00	23.00	39.00	3.972	5.710	9.682	9.012	0.670	73.645
	MIDALE (UNIT VII)	2.496	10.00	27.00	37.00	0.250	0.674	0.924	0.784	0.140	11.136
	MIDALE (DOUGLASTON UNIT)	2.255	12.30	18.40	30.70	0.277	0.415	0.692	0.478	0.214	14.372
	MIDALE (LAMPMAN UNIT)	0.934	13.00	13.80	26.80	0.121	0.129	0.250	0.231	0.019	3.084
	MIDALE (NORTH VOL UNIT NO. 1)	1.963	10.00	7.80	17.80	0.196	0.153	0.349	0.198	0.151	13.100
	MIDALE (NORTH VOL UNIT NO. 2)	1.875	5.40	0.00	5.40	0.101	0.000	0.101	0.095	0.006	4.384
	MIDALE (NON-UNIT)	7.037	11.27	0.57	11.84	0.793	0.040	0.833	0.700	0.133	29.144
STORTHOAKS	ALIDA-TILSTON	3.686	21.80	0.00	21.80	0.804	0.000	0.804	0.678	0.126	13.917
TABLELAND	WINNIPEGOSIS (VOL UNIT NO. 1)	0.658	17.90	14.90	32.80	0.118	0.098	0.216	0.085	0.131	15.976
	WINNIPEGOSIS (NON-UNIT)	0.149	57.00	0.00	57.00	0.085	0.000	0.085	0.028	0.057	9.291
VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)	1.479	11.40	0.00	11.40	0.169	0.000	0.169	0.167	0.002	2.569
	FROBISHER (NON-UNIT)	6.815	16.50	0.00	16.50	1.454	0.000	1.454	1.165	0.289	52.086
WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)	0.773	27.90	0.00	27.90	0.216	0.000	0.216	0.154	0.062	4.994
WAUCHOPE	ALIDA-TILSTON	1.788	14.80	0.00	14.80	0.265	0.000	0.265	0.171	0.094	22.946
WAUCHOPE NORTH	TILSTON	0.412	14.90	0.00	14.90	0.061	0.000	0.061	0.051	0.010	3.546
WEYBURN	MIDALE	1.550	3.60	0.00	3.60	0.056	0.000	0.056	0.044	0.012	7.020
WHITE BEAR	TILSTON	3.694	40.90	0.00	40.90	1.511	0.000	1.511	1.102	0.409	40.624
WHITE BEAR	TILSTON-SOURIS VALLEY	1.077	15.40	0.00	15.40	0.166	0.000	0.166	0.135	0.031	16.387
WILDWOOD	ALIDA	0.967	16.80	0.00	16.80	0.162	0.000	0.162	0.141	0.021	4.185
WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)	4.857	17.00	25.50	42.50	0.826	1.239	2.065	1.691	0.374	43.655
	FROBISHER-ALIDA (N CENTRAL VOL UNIT)	1.216	14.00	5.70	19.70	0.170	0.069	0.239	0.226	0.013	3.569
	FROBISHER-ALIDA (N DALES UNIT NO. 1)	1.151	35.00	13.00	48.00	0.403	0.150	0.553	0.525	0.028	4.793
	FROBISHER-ALIDA (KISBEY SD VOL UNIT)	0.255	50.70	0.00	50.70	0.129	0.000	0.129	0.122	0.007	1.338
	FROBISHER-ALIDA (NON-UNIT)	17.004	18.35	0.39	18.74	3.120	0.068	3.188	2.468	0.718	72.051
WINMORE	FROBISHER	0.489	7.96	0.00	7.96	0.039	0.000	0.039	0.037	0.002	1.356
WORDSWORTH	FROBISHER-ALIDA	6.603	8.05	0.00	8.05	0.532	0.000	0.532	0.455	0.077	17.553
WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)	5.025	16.70	20.30	37.00	0.839	1.020	1.859	1.725	0.134	20.322
	FROBISHER (NON-UNIT)	7.022	21.90	0.00	21.90	1.538	0.000	1.538	1.282	0.256	46.166
WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)	1.041	17.80	6.40	24.20	0.185	0.067	0.252	0.250	0.002	1.151
	MIDALE (VOLUNTARY UNIT NO. 2)	0.841	10.60	10.70	21.30	0.089	0.090	0.179	0.165	0.014	1.537
	MIDALE (NON-UNIT)	2.117	7.18	0.00	7.18	0.152	0.000	0.152	0.150	0.002	1.752
MISCELLANEOUS	ALIDA	5.232	3.45	0.00	3.45	0.181	0.000	0.181	0.147	0.034	17.002
	BAKKEN	2.097	7.10	0.00	7.10	0.149	0.000	0.149	0.100	0.049	8.974
	BIRDBEAR	0.117	7.40	0.00	7.40	0.009	0.000	0.009	0.006	0.003	0.886
	FROBISHER	14.773	4.60	0.00	4.60	0.680	0.000	0.680	0.424	0.256	48.872
	FROBISHER-ALIDA	7.790	5.60	0.00	5.60	0.436	0.000	0.436	0.370	0.066	15.136
	LOWER WATROUS	0.353	6.50	0.00	6.50	0.023	0.000	0.023	0.022	0.001	0.707
	MIDALE	4.838	6.00	0.00	6.00	0.290	0.000	0.290	0.210	0.080	20.579

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
971	13.70	12.5	30.0	1.333	828	1067	MISSISSIPPIAN	1955	ROSEBANK	ALIDA (VOL UNIT NO. 1)
971	15.00	14.2	37.5	1.316	841	1067	MISSISSIPPIAN	1955		ALIDA (NON-UNIT)
356	8.39	12.2	35.0	1.266	864	1074	MISSISSIPPIAN	1954	ROSEBANK SOUTH	ALIDA
405	11.50	16.5	35.0	1.163	880	1240	MISSISSIPPIAN	1963	SHERWOOD	FROBISHER
194	15.40	5.9	40.0	1.333	854	1204	MISSISSIPPIAN	1956	SILVERTON	FROBISHER
923	4.36	19.5	45.0	1.111	864	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
712	6.10	13.3	35.0	1.333	861	1334	MISSISSIPPIAN	1965	SOURIS FLAT	FROBISHER
275	7.10	12.7	40.0	1.111	859	1143	MISSISSIPPIAN	1961	SOUTH FLETWODE	TILSTON
744	9.10	13.8	35.0	1.235	862	1162	MISSISSIPPIAN	1960	STAR VALLEY	FROBISHER-ALIDA
383	5.88	9.2	35.0	1.408	833	1409	MISSISSIPPIAN	1954	STEELMAN	FROBISHER (VOL UNIT NO. 1)
227	7.60	10.1	35.0	1.333	848	1409	MISSISSIPPIAN	1954		FROBISHER (DOUGLASTON UNIT)
3366	8.70	10.9	35.0	1.333	849	1409	MISSISSIPPIAN	1954		FROBISHER (NON-UNIT)
5463	4.21	17.1	35.0	1.389	843	1399	MISSISSIPPIAN	1954	STEELMAN	MIDALE (UNIT IA)
2072	9.50	16.5	28.8	1.389	858	1399	MISSISSIPPIAN	1954		MIDALE (UNIT II)
2818	4.60	18.9	35.0	1.389	827	1399	MISSISSIPPIAN	1954		MIDALE (UNIT III)
5308	3.29	16.4	35.0	1.389	824	1399	MISSISSIPPIAN	1954		MIDALE (UNIT IV)
2849	3.30	14.9	35.0	1.389	837	1399	MISSISSIPPIAN	1954		MIDALE (UNIT V)
6685	5.12	15.5	35.0	1.389	843	1399	MISSISSIPPIAN	1954		MIDALE (UNIT VI)
713	4.18	17.9	35.0	1.389	870	1399	MISSISSIPPIAN	1954		MIDALE (UNIT VII)
745	4.20	15.4	35.0	1.389	–	1399	MISSISSIPPIAN	1954		MIDALE (DOUGLASTON UNIT)
437	2.32	18.6	31.2	1.389	862	1399	MISSISSIPPIAN	1954		MIDALE (LAMPMAN UNIT)
971	4.13	10.0	32.0	1.389	–	1399	MISSISSIPPIAN	1954		MIDALE (NORTH VOL UNIT NO. 1)
551	6.10	12.3	37.0	1.389	–	1399	MISSISSIPPIAN	1954		MIDALE (NORTH VOL UNIT NO. 2)
3123	4.50	10.7	35.0	1.389	846	1399	MISSISSIPPIAN	1954		MIDALE (NON-UNIT)
697	6.35	14.4	35.0	1.124	842	1066	MISSISSIPPIAN	1962	STORTHOAKS	ALIDA-TILSTON
68	14.58	12.2	18.4	1.500	727	2576	DEVONIAN	1975	TABLELAND	WINNIPEGOSIS (VOL UNIT NO. 1)
35	10.49	7.5	19.0	1.500	727	2576	DEVONIAN	1975		WINNIPEGOSIS (NON-UNIT)
129	17.10	12.0	35.0	1.163	873	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)
664	22.84	10.4	35.0	1.163	838	1270	MISSISSIPPIAN	1969		FROBISHER (NON-UNIT)
401	3.20	11.4	40.0	1.136	860	1242	MISSISSIPPIAN	1966	WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)
259	6.60	19.6	40.0	1.124	852	1140	MISSISSIPPIAN	1980	WAUCHOPE	ALIDA-TILSTON
113	4.50	15.0	40.0	1.111	852	1083	MISSISSIPPIAN	1971	WAUCHOPE NORTH	TILSTON
178	10.28	13.8	31.0	1.124	877	1377	MISSISSIPPIAN	1954	WEYBURN	MIDALE
405	13.30	12.7	40.0	1.111	862	1060	MISSISSIPPIAN	1957	WHITE BEAR	TILSTON
308	7.53	8.6	40.0	1.111	853	1189	MISSISSIPPIAN	1963	WHITE BEAR	TILSTON-SOURIS VALLEY
162	8.50	14.4	35.0	1.333	852	1184	MISSISSIPPIAN	1966	WILDWOOD	ALIDA
1084	6.10	12.9	27.0	1.282	843	1249	MISSISSIPPIAN	1957	WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)
324	6.25	11.0	30.0	1.282	843	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (N CENTRAL VOL UNIT)
388	5.91	9.9	35.0	1.282	–	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (N DALES UNIT NO. 1)
81	3.41	20.0	40.0	1.299	–	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (OSBEY SD VOL UNIT)
2379	11.00	11.9	30.0	1.282	861	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (NON-UNIT)
227	4.70	9.7	45.0	1.163	869	1140	MISSISSIPPIAN	1968	WINMORE	FROBISHER
935	11.15	10.6	25.0	1.282	853	1257	MISSISSIPPIAN	1962	WORDSWORTH	FROBISHER-ALIDA
1748	4.51	13.1	42.1	1.190	844	1237	MISSISSIPPIAN	1959	WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)
2832	4.90	10.4	42.1	1.190	861	1237	MISSISSIPPIAN	1959		FROBISHER (NON-UNIT)
671	1.92	14.8	35.0	1.190	838	1230	MISSISSIPPIAN	1960	WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)
356	3.14	15.7	39.3	1.266	–	1230	MISSISSIPPIAN	1960		MIDALE (VOLUNTARY UNIT NO. 2)
567	7.06	10.3	35.0	1.266	844	1230	MISSISSIPPIAN	1960		MIDALE (NON-UNIT)
1361	5.84	13.5	35.0	1.333	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
648	3.40	13.5	25.0	1.064	–	–	MISSISSIPPIAN	–		BAKKEN
65	2.50	11.3	25.0	1.176	–	–	DEVONIAN	–		BIRDBEAR
3354	8.77	10.3	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER
1458	7.94	13.8	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA
194	2.30	16.0	45.0	1.111	–	–	MISSISSIPPIAN	–		LOWER WATROUS
1652	5.72	10.5	35.0	1.333	–	–	MISSISSIPPIAN	–		MIDALE

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/89	REMAINING RESERVES	1989 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
MISCELLANEOUS	RATCLIFFE	0.222	7.30	0.00	7.30	0.016	0.000	0.016	0.015	0.001	1.970
	RED RIVER	0.901	5.80	0.00	5.80	0.052	0.000	0.052	0.051	0.001	0.308
	SOURIS VALLEY	2.926	1.64	0.00	1.64	0.048	0.000	0.048	0.041	0.007	3.619
	TILSTON	3.881	2.31	0.00	2.31	0.090	0.000	0.090	0.057	0.033	7.840
	TILSTON-SOURIS VALLEY	0.180	0.10	0.00	0.10	0.000	0.000	0.000	0.000	0.000	0.000
	WINNIPEGOSIS	12.741	6.40	0.00	6.40	0.815	0.000	0.815	0.114	0.701	71.796
	YEOMAN	0.208	18.80	0.00	18.80	0.039	0.000	0.039	0.031	0.008	2.577
	TOTAL AREA IV LIGHT	**623.453**				**105.685**	**38.800**	**144.485**	**116.488**	**27.999**	**2989.098**
	PROVINCIAL TOTAL	**3313.686**				**302.002**	**187.707**	**489.709**	**370.446**	**119.263**	**11702.119**

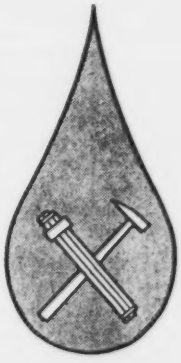
OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ---PER CENT---	AVERAGE CONNATE WATER ---PER CENT---	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
32	6.40	22.2	35.0	1.333	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	RATCLIFFE
194	13.80	6.9	35.0	1.333	–	–	ORDOVICIAN	–		RED RIVER
397	14.24	11.5	50.0	1.111	–	–	MISSISSIPPIAN	–		SOURIS VALLEY
680	7.77	13.8	40.0	1.111	–	–	MISSISSIPPIAN	–		TILSTON
64	7.90	7.9	50.0	1.111	–	–	MISSISSIPPIAN	–		TILSTON-SOURIS VALLEY
686	32.20	10.3	30.0	1.250	–	–	DEVONIAN	–		WINNIPEGOSIS
32	14.33	9.3	35.0	1.333	–	–	ORDOVICIAN	–		YEOMAN

RESERVOIR DATA

RESERVES AND

PRODUCTION—GAS



FIVE YEAR GAS SUMMARY

	1985	1986	1987	1988	1989
INITIAL ESTABLISHED RESERVES (Million Cubic Metres)					
Non-Associated	90 679.9	96 103.9	100 408.3	109 616.2	118 629.6
Associated	1 822.6	1 949.0	1 922.5	1 922.5	1 757.9
Dissolved	6 535.2	7 561.5	7 602.6	7 602.6	9 915.3
PROVINCIAL TOTAL	99 037.7	105 614.4	109 933.4	119 141.3	130 302.8
REMAINING ESTABLISHED RESERVES (Million Cubic Metres)					
Non-Associated	61 008.5	64 434.6	66 487.0	71 897.7	75 562.1
Associated	942.9	1 039.0	983.4	961.0	904.4
Dissolved	1 316.1	2 078.2	1 812.0	1 510.2	3 322.1
PROVINCIAL TOTAL	63 267.5	67 551.8	69 282.4	74 368.9	79 788.6
YEARLY PRODUCTION (Million Cubic Metres)					
Non-Associated	1 639.7	1 998.6	2 228.1	3 765.1	5 336.3
Associated	23.5	30.2	29.3	22.4	1.9
Dissolved	240.8	264.2	307.3	301.8	390.7
PROVINCIAL TOTAL	1 904.0	2 293.0	2 564.7	4 089.3	5 728.9
NUMBER OF PRODUCING WELLS					
Non-Associated	1 545	2 070	2 331	3 311	4 363
Associated	15	15	15	15	3
PROVINCIAL TOTAL	1 560	2 085	2 346	3 326	4 366
AVERAGE DAILY PRODUCTION (Million Cubic Metres Per Day)					
Non-Associated	8.981	9.492	11.049	18.760	20.944
Associated	0.092	0.084	0.081	0.073	0.007
Dissolved	0.659	0.724	0.844	0.826	1.070
PROVINCIAL TOTAL	9.732	10.300	11.974	19.659	22.021

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/89	REMAINING RESERVES DEC 31/89	ESTIMATED HEATING VALUE MJ/m3
					——MILLION CUBIC METRES——			
NON-ASSOCIATED GAS RESERVES								
BAYHURST	VIKING (VOLUNTARY UNIT)	2 567.7	80	5	1 951.5	1 940.7	10.8	37.4
BAYHURST WEST	VIKING (VOLUNTARY UNIT)	304.7	75	5	217.1	200.0	17.1	35.6
BEACON HILL	MANNVILLE SAND	2 804.8	85	5	2 264.9	1 292.0	972.9	35.6
BEACON HILL SOUTH	MANNVILLE SAND	1 734.4	85	5	1 400.5	452.2	948.3	35.6
BEACON HILL WEST	MANNVILLE SAND	572.6	80	5	435.2	177.4	257.8	35.9
BEVERLEY EAST	CANTUAR SAND (VOL UNIT NO. 1)	378.0	90	5	323.2	260.2	63.0	36.9
BIGSTICK	SECOND WHITE SPECKS	17 235.5	84	5	13 753.9	2 698.7	11 054.2	35.6
BROCK	VIKING (UNIT)	765.2	80	5	581.6	570.1	11.5	36.3
	VIKING (NON-UNIT)	52.3	85	5	42.2	2.2	40.0	36.3
BROCK EAST	VIKING SAND	309.8	35	5	103.0	11.8	91.2	34.6
BRONSON LAKE	COLONY SAND	345.3	80	5	282.4	88.3	194.1	35.9
	WASECA SAND	22.1	75	5	15.7	3.5	12.2	36.3
BURSTALL	MEDICINE HAT SAND	441.9	65	5	272.9	8.1		35.4
	MILK RIVER	306.9	65	5	189.5	7.3	334.0	35.4
	MILK RIVER-MEDICINE HAT	–	–	–	–	113.0		35.4
BURSTALL NORTH	VIKING SAND	232.0	80	5	176.3	69.8	106.5	35.6
CAVALIER	SPINNEY HILL SAND	119.6	80	5	90.9	84.8	6.1	32.4
COLEVILLE-SMILEY	VIKING (UNIT)	6 995.6	85	5	5 648.9	5 107.7	541.2	38.4
	VIKING (NON-UNIT)	58.3	80	5	44.3	35.8	8.5	38.3
CONSUL	SECOND WHITE SPECKS	152.5	70	5	101.4	0.0	101.4	34.6
	UPPER SHAUNAVON	266.6	80	5	202.6	0.0	202.6	36.7
CRANE LAKE	MILK RIVER	1 015.4	65	5	627.0	54.0	573.0	35.4
CRANE LAKE SOUTH	SECOND WHITE SPECKS	3 949.7	75	5	2 814.2	402.6	2 411.6	35.4
DODSLAND NORTH	VIKING SAND (UNIT)	842.9	80	5	640.6	494.6	146.0	40.7
	VIKING SAND (NON-UNIT)	1 238.7	65	5	764.9	182.9	582.0	40.7
DRIVER	BAKKEN SAND	259.7	75	5	185.0	79.3	105.7	37.2
	MANNVILLE SAND	279.5	75	5	199.1	92.7	106.4	37.1
FLAT VALLEY	COLONY SAND	307.7	80	5	233.9	14.3	219.6	35.1
	ST. WALBURG SAND	89.5	80	5	68.0	0.0	68.0	33.9
FORT PITT	MANNVILLE SAND	355.8	80	5	270.4	102.6	167.8	35.9
FORT PITT NORTH	COLONY SAND	463.8	80	5	352.5	206.9	145.6	37.0
	WASECA SAND	21.4	75	5	15.2	3.8	11.4	35.8
FREEFIGHT	MILK RIVER	2 605.4	65	5	1 606.8	227.0	1 381.8	35.4
FRENCHMAN BUTTE	COLONY SAND	151.7	80	5	115.3	11.8	103.5	35.9
	ST. WALBURG SAND	132.2	80	5	100.5	12.6	87.9	35.2
	WASECA SAND	38.6	80	5	29.3	3.9	25.4	36.3
GLIDDEN	VIKING SAND (VOL UNIT NO. 1)	128.7	74	5	90.5	90.5	0.0	35.8
GREENAN	VIKING SAND	1 340.8	30	5	382.1	329.4	52.7	35.2
GULL LAKE	CANTUAR SAND	794.8	70	5	528.5	490.6	37.9	38.4
HATTON	MEDICINE HAT SAND (UNIT)	6 871.1	80	5	5 222.0	4 375.4	846.6	35.4
	MEDICINE HAT SAND (AGREEMENT AREA)	1 969.1	80	5	1 496.5	751.9	744.6	35.4
	MEDICINE HAT SAND (NON-UNIT)	12 221.3	80	5	9 288.2	2 136.2		35.4
	MILK RIVER	52 643.0	65	5	32 507.1	5 875.4	29 433.8	35.4
	MILK RIVER - MEDICINE HAT	–	–	–	–	4 349.9		35.4
HOOSIER	VIKING SAND (UNIT)	4 643.2	60	5	2 646.6	2 429.1	217.5	37.3
	VIKING SAND (NON-UNIT)	35.1	60	5	20.0	20.0	0.0	37.3
INGEBRIGT	MILK RIVER	6 008.1	65	5	3 710.0	514.1	3 195.9	35.4
LIEBENTHAL	MILK RIVER	1 012.9	65	5	625.5	209.6	415.9	35.4
LLOYDMINSTER	COLONY SAND	286.5	85	5	231.3	224.0	7.3	34.4
LOVERNA NORTH	MANNVILLE SAND	41.6	75	5	29.6	16.4	13.2	37.3
LOVERNA SOUTH	BAKKEN SAND	487.7	80	5	355.5	302.9	52.6	37.4
	VIKING SAND	239.1	75	5	170.4	163.6	6.8	37.9
LOVERNA WEST	BAKKEN SAND	214.3	75	5	152.7	32.1	120.6	39.1
MAKWA	MANNVILLE SAND	1 021.6	75	5	727.9	67.3	660.6	36.1
MARENGO	VIKING SAND	323.7	80	5	246.0	0.6	245.4	36.3

NATURAL GAS RESERVOIR DATA

1989 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ---PER	AVERAGE CONNATE WATER CENT---	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
											NON-ASSOCIATED GAS RESERVES
48.104	0.365	8 903	2.71	25.0	35.0	0.580	661	CRETACEOUS	1958	BAYHURST	VIKING (VOLUNTARY UNIT)
6.742	0.023	1 333	1.62	30.5	35.0	0.580	696	CRETACEOUS	1968	BAYHURST WEST	VIKING (VOLUNTARY UNIT)
119.739	0.374	15 819	3.84	35.0	40.0	0.568	274	CRETACEOUS	1963	BEACON HILL	MANNVILLE SAND
0.000	0.000	5 288	7.11	35.0	40.0	0.568	274	CRETACEOUS	1963	BEACON HILL SOUTH	MANNVILLE SAND
17.382	0.100	1 813	6.30	35.0	40.0	0.573	310	CRETACEOUS	1978	BEACON HILL WEST	MANNVILLE SAND
8.540	0.025	874	2.53	28.1	33.0	0.583	972	CRETACEOUS	1965	BEVERLEY EAST	CANTUAR SAND (VOL UNIT NO. 1)
901.506	2.877	73 283	2.54	20.4	30.0	0.580	692	CRETACEOUS	1980	BIGSTICK	SECOND WHITE SPECKS
1.962	0.008	5 698	2.19	14.5	40.0	0.588	716	CRETACEOUS	1951	BROCK	VIKING (UNIT)
2.171	0.017	777	2.33	15.7	40.0	0.588	716	CRETACEOUS	1951		VIKING (NON-UNIT)
1.137	0.007	3 108	0.91	24.0	40.0	0.597	720	CRETACEOUS	1967	BROCK EAST	VIKING SAND
62.207	0.206	1 639	3.88	28.0	28.0	0.574	455	CRETACEOUS	1974	BRONSON LAKE	COLONY SAND
3.169	0.098	288	2.02	22.5	43.0	0.570	457	CRETACEOUS	1986		WASECA SAND
1.304	0.004	4 274	2.80	16.0	50.0	0.575	520	CRETACEOUS	1952	BURSTALL	MEDICINE HAT SAND
0.670	0.002	4 209	2.20	16.0	45.0	0.574	460	CRETACEOUS	1952		MILK RIVER
24.923	0.082	–	–	–	–	–	–	CRETACEOUS	1952		MILK RIVER-MEDICINE HAT
15.160	0.046	1 011	1.90	26.0	45.0	0.580	748	CRETACEOUS	1973	BURSTALL NORTH	VIKING SAND
0.000	0.000	1 518	1.22	25.0	30.0	0.620	400	CRETACEOUS	1972	CAVALIER	SPINNEY HILL SAND
39.168	0.142	20 980	3.05	22.5	32.0	0.600	686	CRETACEOUS	1951	COLEVILLE-SMILEY	VIKING (UNIT)
1.382	0.004	226	2.44	25.5	32.0	0.606	686	CRETACEOUS	1951		VIKING (NON-UNIT)
0.000	0.000	518	3.05	23.0	40.0	0.591	860	CRETACEOUS	1971	CONSUL	SECOND WHITE SPECKS
0.000	0.000	777	2.13	20.0	25.0	0.600	1 305	JURASSIC	1971		UPPER SHAUNAVON
40.380	0.522	9 065	3.31	16.0	45.0	0.574	442	CRETACEOUS	1970	CRANE LAKE	MILK RIVER
331.086	1.233	27 843	2.59	14.0	41.0	0.572	700	CRETACEOUS	1983	CRANE LAKE SOUTH	SECOND WHITE SPECKS
11.053	0.050	4 452	2.01	22.4	35.0	0.615	669	CRETACEOUS	1953	DODSLAND NORTH	VIKING SAND (UNIT)
42.265	0.151	11 396	1.50	22.4	50.0	0.621	669	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
37.616	0.114	999	2.66	17.0	25.0	0.564	800	MISSISSIPPIAN	1985	DRIVER	BAKKEN SAND
37.320	0.113	1 222	2.27	24.5	45.0	0.578	749	CRETACEOUS	1985		MANNVILLE SAND
0.000	0.000	1 036	5.80	36.0	40.0	0.582	298	CRETACEOUS	1971	FLAT VALLEY	COLONY SAND
0.000	0.000	1 036	2.00	33.0	40.0	0.594	202	CRETACEOUS	1977		ST. WALBURG SAND
13.463	0.045	1 275	5.12	23.2	15.5	0.578	388	CRETACEOUS	1972	FORT PITT	MANNVILLE SAND
35.198	0.137	1 981	3.73	27.2	17.9	0.568	473	CRETACEOUS	1971	FORT PITT NORTH	COLONY SAND
1.911	0.016	259	1.50	32.0	43.0	0.575	495	CRETACEOUS	1988		WASECA SAND
197.329	0.967	14 504	5.66	16.0	45.0	0.574	434	CRETACEOUS	1970	FREEFIGHT	MILK RIVER
11.813	0.071	1 554	2.03	27.4	37.8	0.577	424	CRETACEOUS	1984	FRENCHMAN BUTTE	COLONY SAND
12.591	0.069	777	2.77	32.0	37.0	0.575	351	CRETACEOUS	1974		ST. WALBURG SAND
3.891	0.022	518	1.83	27.6	50.0	0.576	466	CRETACEOUS	1974		WASECA SAND
0.000	0.000	1 813	0.76	21.0	40.0	0.584	894	CRETACEOUS	1953	GLIDDEN	VIKING SAND (VOL UNIT NO. 1)
5.561	0.025	5 952	1.98	24.6	35.0	0.596	655	CRETACEOUS	1969	GREENAN	VIKING SAND
1.705	0.005	2 011	3.14	23.0	45.0	0.598	1 057	CRETACEOUS	1957	GULL LAKE	CANTUAR SAND
190.045	0.706	43 491	3.26	21.0	50.0	0.575	477	CRETACEOUS	1953	HATTON	MEDICINE HAT SAND (UNIT)
14.905	0.068	13 727	2.96	21.0	50.0	0.575	477	CRETACEOUS	1953		MEDICINE HAT SAND (AGREEMENT AREA)
109.494	0.426	105 616	2.74	18.3	50.0	0.575	477	CRETACEOUS	1953		MEDICINE HAT SAND (NON-UNIT)
866.480	3.528	161 400	9.84	16.0	45.0	0.574	335	CRETACEOUS	1953		MILK RIVER
1 027.455	3.434	–	–	–	–	–	–	CRETACEOUS	1953		MILK RIVER - MEDICINE HAT
14.454	0.061	12 468	3.32	23.0	32.0	0.600	732	CRETACEOUS	1953	HOOSIER	VIKING SAND (UNIT)
0.000	0.000	129	3.81	23.0	32.0	0.600	732	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
233.238	0.895	28 490	6.32	16.0	45.0	0.574	414	CRETACEOUS	1970	INGEBRIGT	MILK RIVER
23.463	0.296	19 360	1.50	16.0	45.0	0.578	396	CRETACEOUS	1974	LIEBENTHAL	MILK RIVER
1.721	0.027	1 101	4.16	25.0	30.0	0.568	518	CRETACEOUS	1935	LLOYDMINSTER	COLONY SAND
14.142	0.040	259	1.82	24.7	56.3	0.578	768	CRETACEOUS	1973	LOVERNA NORTH	MANNVILLE SAND
6.325	0.036	1 613	2.08	20.2	21.0	0.580	826	MISSISSIPPIAN	1973	LOVERNA SOUTH	BAKKEN SAND
8.854	0.032	2 059	2.01	22.5	53.0	0.592	689	CRETACEOUS	1973		VIKING SAND
28.424	0.089	593	4.06	17.0	40.0	0.605	844	MISSISSIPPIAN	1980	LOVERNA WEST	BAKKEN SAND
57.239	0.169	3 367	5.69	29.5	25.0	0.572	315	CRETACEOUS	1984	MAKWA	MANNVILLE SAND
0.000	0.000	1 410	1.89	25.0	35.0	0.576	728	CRETACEOUS	1954	MARENGO	VIKING SAND

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/89	REMAINING RESERVES DEC 31/89	ESTIMATED HEATING VALUE MJ/m3
					——MILLION CUBIC METRES——			
MILTON	VIKING SAND	1 047.2	85	5	845.6	812.7	32.9	37.3
PECK LAKE	COLONY SAND	379.7	85	5	306.6	84.3	222.3	36.1
PIERCELAND	MANNVILLE SAND	1 581.1	93	5	1 396.9	683.1	713.8	36.5
SENATE	SECOND WHITE SPECKS	765.0	65	5	472.4	2.8	469.6	35.8
SUPERB	BAKKEN SAND (VOL UNIT NO. 1)	279.8	70	5	186.1	31.6	154.5	37.1
	BAKKEN SAND (NON-UNIT)	1.8	70	5	1.2	1.2	0.0	37.1
TANGLEFLAGS	COLONY SAND	625.0	75	5	445.3	335.0	110.3	35.9
	MCLAREN SAND (VOL UNIT NO. 3)	134.9	75	5	96.1	41.6	54.5	35.6
	MCLAREN SAND (NON-UNIT)	384.4	75	5	273.9	178.2	95.7	35.6
	SECOND WHITE SPECKS	112.5	75	5	80.2	36.7	43.5	36.1
	ST. WALBURG SAND	123.5	75	5	88.0	36.5	51.5	35.8
TOTNES	VIKING SAND (VOLUNTARY UNIT)	465.8	80	5	354.0	305.4	48.6	35.5
	VIKING SAND (NON-UNIT)	155.2	80	5	118.0	1.6	116.4	35.5
UNITY SOUTH	SPARKY SAND	71.8	73	5	49.6	23.5	26.3	35.2
	UNITY SAND	312.3	90	5	267.0	267.0	0.0	33.6
	VIKING SAND	73.9	65	5	45.6	23.2	22.4	37.4
WHEAT VALLEY	CANTUAR SAND	345.1	50	5	163.9	52.4	111.5	37.9
WHITESIDE	RIBSTONE CREEK SAND (VOL UNIT)	608.5	85	5	491.4	448.3	43.1	37.4
WHITESIDE WEST	RIBSTONE CREEK SAND	118.1	80	5	86.8	60.9	28.9	36.0
	VIKING SAND	454.2	45	5	194.2	44.0	150.2	39.1
MISCELLANEOUS	ALIDA	48.9	–	–	39.5	13.0	26.5	39.9
	BAKKEN	2 250.3	–	–	1 656.4	295.6	1 360.8	37.8
	BELLY RIVER	5.9	–	–	4.2	0.0	4.2	36.1
	CANTUAR	80.5	–	–	96.7	32.5	64.2	35.2
	COLONY	5 873.0	–	–	4 433.1	669.7	3 763.4	34.4
	CUMMINGS	42.0	–	–	31.9	9.7	22.2	36.6
	DETRITAL	879.0	–	–	673.1	21.8	651.3	38.0
	LLOYDMINSTER	111.9	–	–	82.7	36.8	45.9	34.4
	MANNVILLE	5 981.4	–	–	4 288.1	146.9	4 141.2	37.4
	MCLAREN	1 357.9	–	–	1 026.2	628.0	398.2	34.4
	MILK RIVER	441.3	–	–	272.4	0.0	272.4	35.9
	REX	143.0	–	–	106.8	21.7	85.1	34.4
	RIBSTONE CREEK	403.9	–	–	285.5	40.5	245.0	34.4
	ROSERAY	196.5	–	–	141.3	44.8	96.5	37.4
	SECOND WHITE SPECKS	1 593.2	–	–	1 054.0	4.1	1 049.9	35.4
	SPARKY	234.8	–	–	171.8	40.3	131.5	34.4
	SPINNEY HILL	104.0	–	–	74.5	6.0	68.5	32.0
	ST. WALBURG	395.7	–	–	294.0	11.9	282.1	35.2
	UPPER SHAUNAVON	266.8	–	–	177.8	0.8	177.0	36.0
	VIKING	4 941.5	–	–	3 119.7	190.8	2 928.1	37.4
	WASECA	134.5	–	–	101.0	10.4	90.6	34.2
	TOTAL NON-ASSOCIATED	**171 206.2**			**118 629.6**	**43 067.5**	**75 562.1**	
ASSOCIATED GAS RESERVES								
ABERFELDY	SPARKY SAND	105.5	80	5	80.2	62.7	17.5	34.4
ALIDA EAST	ALIDA	688.4	55	5	359.7	160.7	199.0	45.0
ALIDA WEST	ALIDA	81.4	85	5	65.7	0.0	65.7	45.0
AVON HILL	VIKING SAND	10.5	80	5	8.0	0.0	8.0	37.4
BUFFALO COULEE	BAKKEN SAND	3.5	60	5	2.0	2.0	0.0	37.2
CANTUAR EAST	CANTUAR SAND	915.8	90	3	799.5	569.3	230.2	37.4
DEE VALLEY	WASECA SAND	75.4	70	5	50.1	0.0	50.1	37.2
EPPING	SPARKY SAND	11.2	80	5	8.5	2.6	5.9	34.4
EUREKA	VIKING SAND	12.6	80	5	9.6	8.8	0.8	40.7
HOOSIER	BAKKEN SAND	48.2	90	5	41.2	15.3	25.9	37.9

NATURAL GAS RESERVOIR DATA

1989 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER	AVERAGE CONNATE WATER CENT—	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
2.376	0.043	4 897	1.74	25.0	32.0	0.604	732	CRETACEOUS	1954	MILTON	VIKING SAND
82.527	0.227	4 144	1.93	30.5	48.0	0.574	443	CRETACEOUS	1969	PECK LAKE	COLONY SAND
57.867	0.383	3 818	9.27	35.0	40.0	0.564	272	CRETACEOUS	1969	PIERCELAND	MANNVILLE SAND
2.018	0.095	3 885	2.17	23.0	40.0	0.578	508	CRETACEOUS	1971	SENATE	SECOND WHITE SPECKS
31.551	0.221	411	4.62	26.0	25.0	0.600	798	MISSISSIPPIAN	1965	SUPERB	BAKKEN SAND (VOL UNIT NO. 1)
0.313	0.003	7	2.50	19.4	30.0	0.600	798	MISSISSIPPIAN	1965		BAKKEN SAND (NON-UNIT)
5.005	0.043	999	6.90	33.5	15.0	0.600	488	CRETACEOUS	1965	TANGLEFLAGS	COLONY SAND
5.171	0.014	389	4.60	30.0	25.0	0.591	475	CRETACEOUS	1965		MCLAREN SAND (VOL UNIT NO. 3)
5.171	0.028	869	5.50	32.0	25.0	0.591	475	CRETACEOUS	1965		MCLAREN SAND (NON-UNIT)
3.842	0.033	1 234	1.50	32.0	40.0	0.591	286	CRETACEOUS	1965		SECOND WHITE SPECKS
2.668	0.023	713	2.50	33.0	40.0	0.581	315	CRETACEOUS	1965		ST. WALBURG SAND
4.253	0.020	1 554	2.71	25.0	40.0	0.584	613	CRETACEOUS	1969	TOTNES	VIKING SAND (VOLUNTARY UNIT)
0.000	0.000	518	2.71	25.0	40.0	0.584	613	CRETACEOUS	1969		VIKING SAND (NON-UNIT)
5.505	0.017	518	2.24	28.0	55.0	0.590	606	CRETACEOUS	1985	UNITY SOUTH	SPARKY SAND
0.000	0.000	880	3.05	26.0	20.0	0.600	632	CRETACEOUS	1944		UNITY SAND
2.891	0.008	777	1.22	21.6	35.0	0.600	503	CRETACEOUS	1945		VIKING SAND
18.279	0.101	1 561	2.10	20.8	38.5	0.580	950	CRETACEOUS	1973	WHEAT VALLEY	CANTUAR SAND
6.732	0.032	2 987	4.11	35.0	30.0	0.568	229	CRETACEOUS	1982	WHITESIDE	RIBSTONE CREEK SAND (VOL UNIT)
6.167	0.028	1 036	3.65	33.0	25.0	0.572	248	CRETACEOUS	1984	WHITESIDE WEST	RIBSTONE CREEK SAND
4.843	0.024	2 072	2.22	22.8	32.0	0.578	724	CRETACEOUS	1956		VIKING SAND
6.890	0.022	129	–	–	–	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
93.715	0.308	2 072	–	–	–	–	–	MISSISSIPPIAN	–		BAKKEN
0.000	0.000	259	–	–	–	–	–	CRETACEOUS	–		BELLY RIVER
6.921	0.039	512	–	–	–	–	–	CRETACEOUS	–		CANTUAR
129.647	0.702	7 353	–	–	–	–	–	CRETACEOUS	–		COLONY
3.066	0.018	32	–	–	–	–	–	CRETACEOUS	–		CUMMINGS
19.638	0.055	259	–	–	–	–	–	PRE-CRETACEOUS	–		DETRITAL
0.000	0.000	131	–	–	–	–	–	CRETACEOUS	–		LLOYDMINSTER
18.259	0.065	1 290	–	–	–	–	–	CRETACEOUS	–		MANNVILLE
66.925	0.213	4 386	–	–	–	–	–	CRETACEOUS	–		MCLAREN
0.000	0.000	259	–	–	–	–	–	CRETACEOUS	–		MILK RIVER
9.444	0.032	518	–	–	–	–	–	CRETACEOUS	–		REX
19.368	0.091	3 096	–	–	–	–	–	CRETACEOUS	–		RIBSTONE CREEK
0.000	0.000	1 032	–	–	–	–	–	CRETACEOUS	–		ROSERAY
3.650	0.021	1 036	–	–	–	–	–	CRETACEOUS	–		SECOND WHITE SPECKS
11.682	0.039	400	–	–	–	–	–	CRETACEOUS	–		SPARKY
0.533	0.011	518	–	–	–	–	–	CRETACEOUS	–		SPINNEY HILL
4.646	0.021	518	–	–	–	–	–	CRETACEOUS	–		ST. WALBURG
0.000	0.000	518	–	–	–	–	–	JURASSIC	–		UPPER SHAUNAVON
58.753	0.224	2 331	–	–	–	–	–	CRETACEOUS	–		VIKING
1.722	0.013	518	–	–	–	–	–	CRETACEOUS	–		WASECA
5 336.327	**20.944**										**TOTAL NON-ASSOCIATED**

ASSOCIATED GAS RESERVES

0.000	0.000	678	2.44	25.0	30.0	0.595	529	CRETACEOUS	1958	ABERFELDY	SPARKY SAND
0.000	0.000	656	5.79	18.1	20.0	0.700	1 116	MISSISSIPPIAN	1954	ALIDA EAST	ALIDA
0.000	0.000	214	3.05	14.3	31.0	0.700	1 137	MISSISSIPPIAN	1955	ALIDA WEST	ALIDA
0.000	0.000	40	2.13	25.0	30.0	0.600	678	CRETACEOUS	1959	AVON HILL	VIKING SAND
0.000	0.000	8	3.05	23.0	25.0	0.585	808	MISSISSIPPIAN	1953	BUFFALO COULEE	BAKKEN SAND
0.000	0.000	1 127	6.69	25.6	41.0	0.599	980	CRETACEOUS	1957	CANTUAR EAST	CANTUAR SAND
0.000	0.000	663	1.50	30.0	30.0	0.597	460	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
0.000	0.000	65	2.44	25.0	20.0	0.609	610	CRETACEOUS	1967	EPPING	SPARKY SAND
0.143	0.001	65	2.01	22.4	35.0	0.622	689	CRETACEOUS	1954	EUREKA	VIKING SAND
0.700	0.002	142	2.44	25.0	36.0	0.578	852	MISSISSIPPIAN	1972	HOOSIER	BAKKEN SAND

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/89	REMAINING RESERVES DEC 31/89	ESTIMATED HEATING VALUE MJ/m3
					------MILLION CUBIC METRES------			
LASHBURN	WASECA SAND	33.9	80	5	25.8	3.1	22.7	34.4
LONE ROCK	SPARKY SAND	2.5	80	5	1.9	0.2	1.7	34.4
NORTH HOOSIER	BAKKEN SAND	10.8	85	5	8.7	4.0	4.7	37.7
NOTTINGHAM	ALIDA	304.3	90	5	260.2	0.0	260.2	45.0
SILVERDALE	SPARKY SAND	27.6	80	5	21.0	12.4	8.6	34.4
SMILEY-DEWAR	VIKING SAND	15.8	80	5	12.0	9.4	2.6	38.3
TANGLEFLAGS	SPARKY SAND	4.7	85	5	3.8	3.0	0.8	34.4
	TOTAL ASSOCIATED	**2 352.1**			**1 757.9**	**853.5**	**904.4**	
DISSOLVED GAS RESERVES								
	AREA I				231.9	116.0	115.9	
	AREA II				2 592.1	1 281.0	1 311.1	
	AREA III				556.2	388.9	167.3	
	AREA IV				6 535.1	4 807.3	1 727.8	
	TOTAL DISSOLVED				**9 915.3**	**6 593.2**	**3 322.1**	
	PROVINCIAL TOTALS	**173 558.3**			**130 302.8**	**50 514.2**	**79 788.6**	

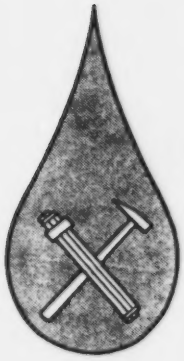
NATURAL GAS RESERVOIR DATA

1989 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	AVERAGE CONNATE WATER CENT----	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
0.000	0.000	129	4.51	25.0	30.0	0.592	498	CRETACEOUS	1986	LASHBURN	WASECA SAND
0.000	0.000	16	2.44	25.0	30.0	0.600	560	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
0.000	0.000	83	1.52	20.0	25.0	0.600	831	MISSISSIPPIAN	1960	NORTH HOOSIER	BAKKEN SAND
0.000	0.000	354	6.10	16.7	34.0	0.700	1 061	MISSISSIPPIAN	1956	NOTTINGHAM	ALIDA
0.000	0.000	129	3.05	25.0	30.0	0.596	573	CRETACEOUS	1965	SILVERDALE	SPARKY SAND
1.098	0.004	65	2.29	25.5	32.0	0.608	694	CRETACEOUS	1973	SMILEY-DEWAR	VIKING SAND
0.000	0.000	24	3.05	25.0	30.0	0.595	511	CRETACEOUS	1969	TANGLEFLAGS	SPARKY SAND
1.941	**0.007**										**TOTAL ASSOCIATED**
											DISSOLVED GAS RESERVES
6.018	0.016										AREA I
157.467	0.431										AREA II
19.978	0.055										AREA III
207.264	0.568										AREA IV
390.727	**1.070**										**TOTAL DISSOLVED**
5 728.995	**22.021**										**PROVINCIAL TOTALS**

OIL AND GAS UNITS

AND ENHANCED

RECOVERY PROJECTS



OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA I					
ABERFELDY UNIT	HUSKY	SPARKY	12-1-82	5-1-86	WATERFLOOD (SUSPENDED)
					IN-SITU WET COMB. (SUSP.)
					STEAMFLOOD (SUSPENDED)
BIG GULLY VOLUNTARY UNIT NO. 1	HUSKY	WASECA & MCLAREN	10-1-70	1-1-71	WATERFLOOD (SUSPENDED)
GOLDEN LAKE VOLUNTARY UNIT	PETRO-CANADA	SPARKY & WASECA	1-1-71	11-1-71	WATERFLOOD (SUSPENDED)
GULLY LAKE WASECA VOLUNTARY UNIT NO. 1	HUSKY	WASECA	8-1-71	–	WATERFLOOD
LASHBURN WASECA VOLUNTARY UNIT	HUSKY	WASECA	4-1-68	8-1-71	WATERFLOOD (SUSPENDED)
MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	SASKOIL	SPARKY	12-1-85	–	WATERFLOOD
MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 2	SASKOIL	SPARKY	7-1-88	–	WATERFLOOD
NORTH DULWICH SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	10-1-70	–	WATERFLOOD (SUSPENDED)
NORTHMINSTER SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	3-1-70	9-1-70	WATERFLOOD (SUSPENDED)
SOUTH ABERFELDY SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	8-1-69	5-1-70	WATERFLOOD (SUSPENDED)
SOUTH EPPING UNIT NO. 1	ESSO RESOURCES	SPARKY & G.P.	2-1-66	9-1-67	WATERFLOOD
SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	ESSO RESOURCES	SPARKY	1-1-72	7-1-73	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 2	AMOCO	LLOYDMINSTER	3-1-81	–	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 3	MOBIL	G.P., MCLAREN & LLOYDMINSTER	2-1-81	–	–
AREA II					
AVON HILL VIKING VOLUNTARY UNIT	UNITED TRI-STAR	VIKING	8-1-85	–	WATERFLOOD
BAYHURST VIKING VOLUNTARY GAS UNIT	TRANSGAS	VIKING	11-1-66	–	GAS STORAGE
BROCK VIKING SAND GAS UNIT	HUSKY	VIKING	3-1-54	–	–
CACTUS LAKE BAKKEN VOLUNTARY UNIT NO. 1	CN EXPLORATION	BAKKEN	5-1-88	–	WATERFLOOD
CACTUS LAKE BAKKEN VOLUNTARY UNIT NO. 2	PETRO-CANADA	BAKKEN	6-1-88	–	WATERFLOOD
COLEVILLE-SMILEY VIKING SAND GAS UNIT	ESSO RESOURCES	VIKING	7-1-55	4-1-72	–
COLEVILLE SOUTH BAKKEN SAND VOLUNTARY UNIT	ESSO RESOURCES	BAKKEN	3-1-88	–	WATERFLOOD
COURT BAKKEN SAND VOLUNTARY UNIT NO. 1	SASKOIL	BAKKEN	5-1-88	–	WATERFLOOD
DODSLAND VIKING GAS VOLUNTARY UNIT	AMOCO	VIKING	11-1-67	1-1-70	–
EAGLE LAKE VIKING VOLUNTARY UNIT	ESSO RESOURCES	VIKING	10-1-86	–	WATERFLOOD
EAST DODSLAND VIKING VOLUNTARY UNIT	PAGE	VIKING	9-1-85	–	WATERFLOOD (SUSPENDED)
GLENEATH UNIT	MARK	VIKING	6-1-66	10-1-67	WATERFLOOD
GLENEATH SOUTH VIKING VOLUNTARY UNIT	ULTRAMAR	VIKING	9-1-85	–	WATERFLOOD
GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1	WESTAR	VIKING	9-1-72	–	–
HOOSIER BAKKEN SAND VOL. UNIT NO. 1	AMOCO	BAKKEN	3-1-81	–	WATERFLOOD
HOOSIER VIKING SAND GAS UNIT	ESSO RESOURCES	VIKING	8-1-57	–	–
KIYU LAKE VIKING VOLUNTARY UNIT	ANNUITY	VIKING	12-1-85	–	–
KIYU LAKE VIKING VOLUNTARY UNIT NO. 2	SUNCOR	VIKING	1-1-88	–	WATERFLOOD
LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT	ULTRAMAR	VIKING	8-1-71	–	–

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/89 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/89 m3/DAY	UNIT NAME
						AREA I
MANNVILLE	INV. 9-SPOT & 5-SPOT	28	–	05-64	–	ABERFELDY UNIT
GLACIAL DRIFT	INV. 9-SPOT & 5-SPOT	–	–	07-66	–	
SURFACE WATER	INV. 9-SPOT	–	–	02-61	–	
DINA	5-SPOT	1 8	– –	10-70	– –	BIG GULLY VOLUNTARY UNIT NO. 1
DINA	MOD. 9-SPOT	58	–	04-71	–	GOLDEN LAKE VOLUNTARY UNIT
DINA	INV. & MOD. 9-SPOT	24	2	07-71	15	GULLY LAKE WASECA VOLUNTARY UNIT NO. 1
DINA	5-SPOT	35	–	–	–	LASHBURN WASECA VOLUNTARY UNIT
DINA	INV. 9-SPOT	37	15	12-85	1 174	MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1
DINA	INV. 5-SPOT	11	9	08-89	592	MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 2
GLACIAL DRIFT	–	1	–	10-70	–	NORTH DULWICH SPARKY VOLUNTARY UNIT
DINA	5-SPOT	5	0	10-70	0	NORTHMINSTER SPARKY VOLUNTARY UNIT
DINA	5-SPOT	49	–	09-69	–	SOUTH ABERFELDY SPARKY VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	58	21	08-66	847	SOUTH EPPING UNIT NO. 1
DINA	INV. 9-SPOT	30	11	03-72	239	SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1
SURFACE WATER	INV. 9-SPOT	16	5	08-61	312	TANGLEFLAGS VOLUNTARY UNIT NO. 2
–	–	42	–	–	–	TANGLEFLAGS VOLUNTARY UNIT NO. 3
						AREA II
DEADWOOD	INV. 9-SPOT	43	2	12-85	40	AVON HILL VIKING VOLUNTARY UNIT
–	–	–	–	–	–	BAYHURST VIKING VOLUNTARY GAS UNIT
–	–	4	–	–	–	BROCK VIKING SAND GAS UNIT
RIBSTONE CREEK	INV. 9-SPOT	12	4	06-88	177	CACTUS LAKE VOLUNTARY UNIT NO. 1
RIBSTONE CREEK	INV. 9-SPOT	84	21	06-88	1 131	CACTUS LAKE VOLUNTARY UNIT NO. 2
–	–	29	–	–	–	COLEVILLE-SMILEY VIKING SAND GAS UNIT
BELLY RIVER	PERIPHERAL	14	1	01-88	40	COLEVILLE SOUTH BAIKEN SAND VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	25	6	06-88	1 008	COURT BAIKEN SAND VOLUNTARY UNIT NO. 1
–	–	12	–	–	–	DODSLAND VIKING GAS VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	148	1	01-67	97	EAGLE LAKE VIKING VOLUNTARY UNIT
DEADWOOD	5-SPOT	239	157	10-85	1 530	EAST DODSLAND VIKING VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	112	37	10-66	428	GLENEATH UNIT
BELLY RIVER	INV. 9-SPOT	7	2	07-85	8	GLENEATH SOUTH VIKING VOLUNTARY UNIT
–	–	0	–	–	–	GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	7	2	01-75	158	HOOSIER BAIKEN SAND VOL. UNIT NO. 1
–	–	14	–	–	–	HOOSIER VIKING SAND GAS UNIT
–	–	34	–	–	–	KIYIU LAKE VIKING VOLUNTARY UNIT
DUPEROW	INV. 9-SPOT	33	11	03-88	14	KIYIU LAKE VIKING VOLUNTARY UNIT NO. 2
–	–	6	–	–	–	LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
NORTH DODSLAND VIKING VOLUNTARY UNIT	ANNUITY	VIKING	6-1-85	–	WATERFLOOD
NORTH DODSLAND VIKING VOLUNTARY UNIT NO. 2	BATTLE CREEK	VIKING	1-1-89	–	–
NORTH EUREKA UNIT	ALLHEART	VIKING	9-1-65	12-1-71	WATERFLOOD
NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	AMOCO	BAKKEN	7-1-70	8-1-73	WATERFLOOD
NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	MARK	MANNVILLE	1-1-69	5-1-80	WATERFLOOD
PLATO VIKING VOLUNTARY UNIT NO. 1	TRI LINK	VIKING	4-1-73	–	WATERFLOOD
SOUTH EUREKA UNIT	ULTRAMAR	VIKING	4-1-65	9-1-71	WATERFLOOD
SUPERB BAKKEN VOLUNTARY GAS UNIT NO. 1	MOBIL	BAKKEN	4-1-89	–	–
TOTNES VIKING GAS VOLUNTARY UNIT NO. 1	SASKOIL	VIKING	1-1-71	–	–
WEST BAYHURST VIKING GAS VOLUNTARY UNIT	ALTEX	VIKING	2-1-72	–	–
WHITESIDE VIKING VOLUNTARY UNIT	BACA	VIKING	9-1-65	–	WATERFLOOD (SUSPENDED)
WHITESIDE VICTORIA VOLUNTARY GAS UNIT	ULTRAMAR	VICTORIA	1-1-68	–	–
AREA III					
ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	3-1-75	–	WATERFLOOD
BATTRUM UNIT NO. 1	MOBIL	ROSERAY	10-1-64	6-1-69	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 2	MOBIL	ROSERAY	10-1-64	–	IN-SITU WET COMBUSTION
BATTRUM VOLUNTARY UNIT NO. 3	MOBIL	ROSERAY	6-1-66	–	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 4	SCEPTRE	ROSERAY	6-1-66	–	WATERFLOOD
BEVERLEY UNIT NO. 1	SASKOIL	UPPER & LOWER ROSERAY	5-1-66	–	WATERFLOOD
BEVERLEY VOLUNTARY UNIT NO. 2	SASKOIL	ROSERAY	6-1-88	–	WATERFLOOD
BEVERLEY CANTUAR VOLUNTARY UNIT NO. 1	SASKOIL	CANTUAR	6-1-88	–	WATERFLOOD
BEVERLEY NORTH CANTUAR VOLUNTARY UNIT NO. 1	SASKOIL	CANTUAR	6-1-88	–	WATERFLOOD
BONE CREEK UNIT	SASKOIL	UPPER SHAUNAVON	6-1-58	7-1-60	WATERFLOOD
BUTTE VOLUNTARY UNIT	AMOCO	UPPER SHAUNAVON	1-1-71	2-1-72	WATERFLOOD
CANTUAR UNIT	SASKOIL	CANTUAR & LOWER ROSERAY	10-1-59	–	WATERFLOOD
COVINGTON UNIT NO. 1	CAN. NORTHWEST	UPPER SHAUNAVON	7-1-89	–	WATERFLOOD
DELTA UNIT NO. 1	SASKOIL	UPPER SHAUNAVON	4-1-66	8-1-69	WATERFLOOD
DELTA UNIT NO. 2	SASKOIL	UPPER SHAUNAVON	8-1-69	–	WATERFLOOD
DELTA VOLUNTARY UNIT NO. 3	SASKOIL	UPPER SHAUNAVON	12-1-86	–	WATERFLOOD
DOLLARD UNIT	ENCOR ENERGY	UPPER SHAUNAVON	9-1-55	7-1-72	WATERFLOOD
EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1	SASKOIL	CANTUAR	8-1-78	–	–
EAST CANTUAR GAS UNIT	AMOCO	CANTUAR & ROSERAY	3-1-75	–	GAS STORAGE
EAST CANTUAR UNIT NO. 1	SASKOIL	CANTUAR & ROSERAY	3-1-75	–	WATERFLOOD (CANTUAR & ROSERAY)
EAST CANTUAR UNIT NO. 2	AMOCO	ROSERAY & CANTUAR	3-1-75	–	WATERFLOOD (ROSERAY)

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/89 PROD.	ACTIVE WELLS 12/89 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/89 m3/DAY	UNIT NAME
DEADWOOD	INV. 9-SPOT	85	0	12-85	0	NORTH DODSLAND VIKING VOLUNTARY UNIT
–	–	21	–	–	–	NORTH DODSLAND VIKING VOLUNTARY UNIT NO. 2
BELLY RIVER	INV. 9-SPOT	1	1	03-83	2	NORTH EUREKA UNIT
RIBSTONE CREEK	LINE DRIVE	18	3	08-70	878	NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT
LEA PARK	–	18	7	12-66	551	NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	32	1	01-73	12	PLATO VIKING VOLUNTARY UNIT NO. 1
RIBSTONE CREEK & BELLY RIVER	INV. 9-SPOT	53	17	09-73	277	SOUTH EUREKA UNIT
–	–	2	–	–	–	SUPERB BAKKEN VOLUNTARY GAS UNIT NO. 1
–	–	2	–	–	–	TOTNES VIKING GAS VOLUNTARY UNIT NO. 1
–	–	1	–	–	–	WEST BAYHURST VIKING GAS VOLUNTARY UNIT
DUPEROW	INV. 9-SPOT	20	2	05-65	13	WHITESIDE VIKING VOLUNTARY UNIT
–	–	2	–	–	–	WHITESIDE VICTORIA VOLUNTARY GAS UNIT
						AREA III
ROSERAY	–	3	1	10-78	14	ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	91	13	03-62	2 597	BATTRUM UNIT NO. 1
–	–		7	10-66		
–	–	22	3	11-65	445	BATTRUM UNIT NO. 2
MANNVILLE	INV. 9-SPOT	41	6	12-66	721	BATTRUM UNIT NO. 3
–	–		3	06-67		
MANNVILLE	INV. 9-SPOT	18	11	08-66	1 444	BATTRUM UNIT NO. 4
MANNVILLE	PERIPHERAL	15	3	01-66	569	BEVERLEY UNIT NO. 1
MANNVILLE	PERIPHERAL	7	2	06-88	579	BEVERLEY VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	31	6	06-88	59	BEVERLEY CANTUAR VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	23	6	06-88	109	BEVERLEY NORTH CANTUAR VOLUNTARY UNIT NO. 1
BELLY RIVER	PERIPHERAL & INV. 9-SPOT	29	15	05-60	1 413	BONE CREEK UNIT
BELLY RIVER	INV. 9-SPOT	37	10	11-70	286	BUTTE VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	82	25	08-60	4 982	CANTUAR UNIT
		18	–	–	–	
ROSERAY SAND	–	3	1	11-68	121	COVINGTON UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	34	9	12-65	1 999	DELTA UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	12	2	10-69	223	DELTA UNIT NO. 2
BELLY RIVER	PERIPHERAL	3	1	07-87	4	DELTA VOLUNTARY UNIT NO. 3
VIKING, BELLY RIVER & MANNVILLE	SEMI-PERIPHERAL	38	17	03-56	2 693	DOLLARD UNIT
–	–	1	–	–	–	EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1
–	–	–	–	–	–	EAST CANTUAR GAS UNIT
MANNVILLE	–	5	2	09-75	224	EAST CANTUAR UNIT NO. 1
		5	3	03-69	245	
MANNVILLE	–	3	1	01-76	27	EAST CANTUAR UNIT NO. 2
		1	–	–	–	

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
EAST DOLLARD VOLUNTARY UNIT	AMERICAN EAGLE	UPPER SHAUNAVON	10-1-70	–	WATERFLOOD
FOSTERTON MAIN UNIT	SASKOIL	ROSERAY	7-1-58	–	WATERFLOOD
FOSTERTON N.W. UNIT	SASKOIL	ROSERAY	7-1-58	9-1-70	WATERFLOOD (SUSPENDED) IN-SITU WET COMBUSTION
GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	AMOCO	CANTUAR	5-1-72	–	WATERFLOOD
GULL LAKE NORTH SHAUNAVON POOL UNIT	AMOCO	UPPER SHAUNAVON	10-1-58	–	WATERFLOOD
GULL LAKE SOUTH VOLUNTARY UNIT NO. 1	SASKOIL	UPPER SHAUNAVON	7-1-86	–	WATERFLOOD
GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	AMOCO	UPPER SHAUNAVON	5-1-72	–	WATERFLOOD
HATTON GAS UNIT	SASKOIL	MEDICINE HAT	5-1-59	–	–
HAZLET UNIT	COPPERWOOD	ROSERAY	8-1-66	–	WATERFLOOD
ILLERBRUN VOLUNTARY UNIT	AMOCO	UPPER SHAUNAVON	11-1-66	5-1-67	WATERFLOOD
INSTOW UNIT	ENCOR ENERGY	UPPER SHAUNAVON	10-1-59	–	WATERFLOOD
INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	5-1-85	–	WATERFLOOD
JOHNSTON UNIT	AMOCO	BASAL CANTUAR UPPER SHAUNAVON	1-1-83	–	WATERFLOOD (BASAL CANTUAR)
LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	OMV (CANADA)	SHAUNAVON	1-1-88	–	WATERFLOOD
NORTH PREMIER UNIT NO. 1	SASKOIL	ROSERAY & UPPER SHAUNAVON	10-1-84	–	WATERFLOOD (ROSERAY)
NORTH PREMIER UNIT NO. 2	SASKOIL	PREMIER SAND	7-1-66	–	WATERFLOOD
NORTH PREMIER VOLUNTARY UNIT NO. 4	SASKOIL	ROSERAY & UPPER SHAUNAVON	9-1-80	–	WATERFLOOD
NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT	OMV (CANADA)	UPPER SHAUNAVON	11-1-72	–	WATERFLOOD
NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT	ESSO RESOURCES	UPPER SHAUNAVON	2-1-68	5-1-68	WATERFLOOD
PENNANT UPPER SHAUNAVON VOLUNTARY UNIT	CAN. NORTHWEST	UPPER SHAUNAVON	8-1-88	–	WATERFLOOD
RAPDAN UNIT	ENCOR ENERGY	UPPER SHAUNAVON	10-1-57	7-1-65	WATERFLOOD
RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2	SASKOIL	UPPER SHAUNAVON	4-1-74	–	WATERFLOOD
SOUTHWEST SUCCESS VOLUNTARY UNIT	ATCOR	ROSERAY & CANTUAR	4-1-83	–	–
SUCCESS UNIT	SASKOIL	ROSERAY & FOSTERTON	12-1-57	–	WATERFLOOD
SUCCESS ALPHA UNIT	SASKOIL	ROSERAY	7-1-60	–	WATERFLOOD
SUCCESS MAIN UNIT	SASKOIL	CANTUAR, ROSERAY & FOSTERTON	9-1-62	–	WATERFLOOD (ROSERAY)
SUCCESS NORTH ROSERAY VOLUNTARY UNIT	TRI LINK	ROSERAY	4-1-84	–	WATERFLOOD
SUFFIELD UNIT NO. 1	SASKOIL	ROSERAY	7-1-66	4-1-72	WATERFLOOD
SUFFIELD UNIT NO. 2	SASKOIL	UPPER SHAUNAVON	9-1-70	–	WATERFLOOD
SUFFIELD UNIT NO. 3	SASKOIL	ROSERAY & UPPER SHAUNAVON	6-1-71	4-1-72	WATERFLOOD
VERLO ROSERAY SAND UNIT	SASKOIL	ROSERAY	9-1-70	10-1-7	WATERFLOOD
WEST FOSTERTON VOLUNTARY UNIT	ESSO RESOURCES	ROSERAY	3-1-67	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/89 PROD.	ACTIVE WELLS 12/89 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/89 m3/DAY	UNIT NAME
BELLY RIVER	PERIPHERAL	9	1	10-70	459	EAST DOLLARD VOLUNTARY UNIT
BELLY RIVER	LINE DRIVE	18	14	06-56	5 139	FOSTERTON MAIN UNIT
BELLY RIVER	–	–	–	03-57	–	FOSTERTON N.W. UNIT
–	–	1	0	03-70	0	
BELLY RIVER	PERIPHERAL & MOD. 9-SPOT	9	3	06-70	270	GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1
SURFACE WATER	–	23	3	08-56	1 133	GULL LAKE NORTH SHAUNAVON POOL UNIT
ROSERAY SAND	–	6	1	06-88	57	GULL LAKE SOUTH VOLUNTARY UNIT NO. 1
BELLY RIVER	–	4	0	05-72	0	GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1
–	–	267	–	–	–	HATTON GAS UNIT
MANNVILLE	PERIPHERAL	6	2	07-70	827	HAZLET UNIT
BELLY RIVER	–	6	3	04-66	732	ILLERBRUN VOLUNTARY UNIT
BELLY RIVER & RAVENSCRAG	PERIPHERAL	51	20	12-57	3 951	INSTOW UNIT
BELLY RIVER	–	9	2	12-65	165	INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT
SURFACE WATER	–	3	1	03-63	17	JOHNSTON UNIT
–	–	0	–	–	–	
BELLY RIVER	–	6	3	07-64	14	LEITCHVILLE SHAUNAVON VOLUNTARY UNIT
MANNVILLE	–	5	3	07-64	1 324	NORTH PREMIER UNIT NO. 1
–	–	1	–	–	–	
MANNVILLE	–	1	1	06-67	60	NORTH PREMIER UNIT NO. 2
MANNVILLE	PERIPHERAL	12	5	02-65	2 349	NORTH PREMIER VOLUNTARY UNIT NO. 4
	–	15	4	12-80	126	
MANNVILLE	–	7	2	02-73	28	NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	–	7	1	07-68	5	NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	5	1	06-88	104	PENNANT UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	52	31	11-62	1 330	RAPDAN UNIT
BELLY RIVER	PARTIAL 5-SPOT	5	1	04-74	33	RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2
–	–	8	1	10-80	181	SOUTHWEST SUCCESS VOLUNTARY UNIT
		1	–	–	–	
MANNVILLE	PERIPHERAL	25	4	08-58	2 502	SUCCESS UNIT
MANNVILLE	–	5	1	09-60	328	SUCCESS ALPHA UNIT
MANNVILLE	PERIPHERAL	13	4	09-56	1 300	SUCCESS MAIN UNIT
MANNVILLE	PERIPHERAL	15	3	08-82	832	SUCCESS NORTH ROSERAY VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	9	2	05-66	609	SUFFIELD UNIT NO. 1
BELLY RIVER	–	13	3	07-70	339	SUFFIELD UNIT NO. 2
BELLY RIVER	PERIPHERAL	10	4	06-70	1 178	SUFFIELD UNIT NO. 3
		2	3		379	
MANNVILLE	–	14	6	06-65	3 924	VERLO ROSERAY SAND UNIT
BELLY RIVER	–	6	2	04-67	395	WEST FOSTERTON VOLUNTARY UNIT

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA IV					
ALAMEDA CENTRAL UNIT	GULF	MIDALE	12-1-62	6-1-69	WATERFLOOD
ALAMEDA EAST UNIT	AMOCO	MIDALE	8-1-62	9-1-65	WATERFLOOD
ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1	ARGYLL	MIDALE	12-1-64		WATERFLOOD
ALIDA UNIT	NAL RESOURCES	ALIDA	12-1-57	–	–
ANTLER VOLUNTARY UNIT NO. 1	UNITED RAYORE	MIDALE	11-1-71	–	WATERFLOOD
BENSON UNIT	SHELL	MIDALE	2-1-65	9-1-67	WATERFLOOD
BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1	AMOCO	MIDALE	11-1-67	6-1-68	WATERFLOOD
BENSON MIDALE BEDS VOLUNTARY UNIT NO. 2	SUMMIT	MIDALE	12-1-69	–	WATERFLOOD
CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1	SASKOIL	FROBISHER-ALIDA	1-1-72	–	–
CARNDUFF SOUTH MIDALE VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	MIDALE	1-1-65	–	WATERFLOOD
CARNDUFF VOLUNTARY UNIT NO. 1	SCEPTRE	MIDALE	12-1-70	–	WATERFLOOD
CULLEN UNIT	NORCEN	MIDALE	10-1-65	5-1-68	–
DOUGLASTON-FROBISHER BEDS UNIT	AMOCO	FROBISHER	8-1-64	–	–
DOUGLASTON-MIDALE BEDS UNIT	AMOCO	MIDALE	6-1-64	10-1-67	WATERFLOOD
EAST CARNDUFF UNIT	GULF	MIDALE	5-1-62	11-1-65	WATERFLOOD
ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	FROBISHER	12-1-69	–	WATERFLOOD
FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	PANCANADIAN	RATCLIFFE	8-1-68	9-1-69	WATERFLOOD
FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 2	POSTELL	RATCLIFFE	11-1-69	–	WATERFLOOD
FLETWODE ALIDA VOLUNTARY UNIT	CANOXY	ALIDA	10-1-68	–	–
FREDA LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	SILVER BAY	RATCLIFFE	6-1-68	7-1-90	WATERFLOOD
GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	BERRY	FROBISHER-ALIDA	11-1-72	–	WATERFLOOD (FROBISHER)
GLEN EWEN UNIT	SCEPTRE	MIDALE	4-1-63	–	WATERFLOOD
HASTINGS FROBISHER UNIT	SASKOIL	FROBISHER	7-1-71	–	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	1-1-70	–	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2	ESSO RESOURCES	FROBISHER	10-1-70	–	WATERFLOOD
HUMMINGBIRD BAKKEN VOLUNTARY UNIT NO. 1	AMOCO	BAKKEN	8-1-68	–	–
HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1	AMOCO	BIRDBEAR	12-1-68	–	–
HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	AMOCO	RATCLIFFE	12-1-68	–	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	MIDALE	2-1-74	–	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2	OMEGA	MIDALE	12-1-67	–	WATERFLOOD
INGOLDSBY MISSION CANYON VOLUNTARY UNIT	ESSO RESOURCES	ALIDA	9-1-65	–	–
KENOSEE TILSTON BEDS VOLUNTARY UNIT	ENCOR ENERGY	TILSTON	9-1-69	–	–
KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1	DAG RESOURCES	UPPER HASTINGS	4-1-74	–	–
LAKE ALMA VOLUNTARY UNIT	PANCANADIAN	RATCLIFFE	4-1-69	–	WATERFLOOD
LAMPMAN UNIT	GULF	MIDALE	3-1-64	10-1-67	WATERFLOOD
LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	1-1-71	–	–
MIDALE UNIT	SHELL	MIDALE	8-1-62	9-1-67	WATERFLOOD
MIDALE SOUTH VOLUNTARY UNIT NO. 1	COMAPLEX	MIDALE	7-1-67	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/89 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/89 m3/DAY	UNIT NAME
						AREA IV
MANNVILLE	INV. 9-SPOT	13	6	03-60	71	ALAMEDA CENTRAL UNIT
MANNVILLE	INV. 9-SPOT	28	15	12-62	548	ALAMEDA EAST UNIT
MANNVILLE	PERIPHERAL	4	4	12-84	45	ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1
–	–	43	–	–	–	ALIDA UNIT
MANNVILLE	–	0	0	11-68	0	ANTLER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	46	10	11-64	200	BENSON UNIT
MANNVILLE	INV. 9-SPOT	14	4	11-67	133	BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	7	–	–	–	BENSON MIDALE BEDS VOLUNTARY UNIT NO. 2
–	–	3	–	–	–	CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1
PRODUCED WATER	INV. 9-SPOT	12	4	08-85	108	CARNDUFF SOUTH MIDALE VOLUNTARY UNIT
RAVENSCRAG	–	6	2	05-71	28	CARNDUFF VOLUNTARY UNIT NO. 1
–	–	5	–	–	–	CULLEN UNIT
–	–	1	–	–	–	DOUGLASTON-FROBISHER BEDS UNIT
MANNVILLE	LINE DRIVE	11	10	06-64	361	DOUGLASTON-MIDALE BEDS UNIT
MANNVILLE	INV. 9-SPOT	99	19	07-62	1 315	EAST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	26	3	11-70	160	ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	27	8	10-66	513	FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1
RAVENSCRAG	INV. 9-SPOT	4	–	–	–	FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 2
–	–	4	–	–	–	FLETWODE ALIDA VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	55	8	08-88	375	FREDA LAKE RATCLIFFE VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	5	1	08-73	112	GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	24	2	10-63	154	GLEN EWEN UNIT
MANNVILLE	INV. 9-SPOT	10	2	10-67	209	HASTINGS FROBISHER UNIT
MANNVILLE	PERIPHERAL	29	3	11-66	305	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT & PERIPHERAL	13	3	11-66	171	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2
–	–	5	–	–	–	HUMMINGBIRD BAKKEN VOLUNTARY UNIT NO. 1
–	–	3	–	–	–	HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1
MANNVILLE	–	6	4	12-67	322	HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	18	5	09-74	37	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	3	1	12-87	11	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2
–	–	37	–	–	–	INGOLDSBY MISSION CANYON VOLUNTARY UNIT
–	–	27	–	–	–	KENOSEE TILSTON BEDS VOLUNTARY UNIT
–	–	11	–	–	–	KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1
MANNVILLE	–	6	4	08-70	400	LAKE ALMA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	9	2	04-64	71	LAMPMAN UNIT
–	–	33	–	–	–	LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1
MANNVILLE	INV. 9-SPOT	337	73	06-60	4 524	MIDALE UNIT
MANNVILLE	PERIPHERAL	7	0	08-87	0	MIDALE SOUTH VOLUNTARY UNIT NO. 1

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
MIDALE SOUTH VOLUNTARY UNIT NO. 2	SASKOIL	MIDALE	8-1-89	–	WATERFLOOD
NORTH ALAMEDA UNIT	GULF	MIDALE	5-1-83	–	WATERFLOOD
NORTH CANTAL UNIT	ESSO RESOURCES	ALIDA	1-1-68	4-1-69	–
NORTH CENTRAL WILLMAR VOLUNTARY UNIT	ENCOR ENERGY	FROBISHER-ALIDA	3-1-78	–	WATERFLOOD
NORTH DALESBORO UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	12-1-70	–	WATERFLOOD
NORTHGATE MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	1-1-84	5-1-90	WATERFLOOD
NORTHWEST BENSON MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	2-1-85	–	WATERFLOOD
NOTTINGHAM NORTH ALIDA BEDS UNIT	N. AMERICAN LIFE	ALIDA	10-1-60	–	–
OUNGRE VOLUNTARY UNIT NO. 1	SUNCOR	OUNGRE	1-1-68	12-1-98	WATERFLOOD
QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT	GULF	KISBEY SAND	7-1-69	–	–
RALPH MIDALE BEDS VOLUNTARY UNIT	MIDALE	MIDALE	10-1-87	–	WATERFLOOD
ROCANVILLE BAKKEN VOLUNTARY UNIT NO. 1	TRITON	BAKKEN	11-1-88	–	WATERFLOOD
ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO 1.	ESSO RESOURCES	FROBISHER-ALIDA	3-1-69	7-1-71	–
SOUTH ALAMEDA UNIT	UPTON	MIDALE	10-1-85	–	WATERFLOOD
SOUTH PINTO UNIT	AMOCO	MIDALE	2-1-85	10-1-86	WATERFLOOD
STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	10-1-70	–	–
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1	RIMOIL	MIDALE	5-1-83	–	WATERFLOOD
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	RIMOIL	MIDALE	10-1-85	–	WATERFLOOD
STEELMAN UNIT NO. IA	ESSO RESOURCES	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. II	ESSO RESOURCES	MIDALE	7-1-61	–	WATERFLOOD
STEELMAN UNIT NO. III	GULF	MIDALE	7-1-61	–	WATERFLOOD
STEELMAN UNIT NO. IV	GULF	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. V	ESSO RESOURCES	MIDALE	7-1-61	7-1-65	WATERFLOOD
STEELMAN UNIT NO. VI	GULF	MIDALE	7-1-61	9-1-66	WATERFLOOD
STEELMAN UNIT NO. VII	UPTON	MIDALE	6-1-62	–	WATERFLOOD
TABLELAND VOLUNTARY UNIT NO. 1	HOME	WINNIPEGOSIS	6-1-88	–	WATERFLOOD
VIEWFIELD VOLUNTARY UNIT NO.1	COMAPLEX	FROBISHER	5-1-74	–	WATERFLOOD
WEST CARINDUFF UNIT	ESSO RESOURCES	MIDALE	1-1-61	5-1-62	WATERFLOOD
WEYBURN UNIT	PANCANADIAN	MIDALE	7-1-63	3-1-71	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2	OMEGA	MIDALE	9-1-87	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 3	MIDALE	MIDALE	1-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 4	MIDALE	MIDALE	6-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 5	SASKOIL	MIDALE	1-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 6	POSTELL	MIDALE	6-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 7	MIDALE	MIDALE	6-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 8	POSTELL	MIDALE	6-1-89	–	WATERFLOOD
WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1	SCEPTRE	FROBISHER-ALIDA	1-1-68	6-1-88	WATERFLOOD
WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	FROBISHER	4-1-67	–	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 1	UNITED RAYORE	MIDALE	4-1-68	–	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 2	SCURRY-RAINBOW	MIDALE	9-1-68	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/89 PROD.	ACTIVE WELLS 12/89 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/89 m3/DAY	UNIT NAME
MANNVILLE	INV. 9-SPOT	7	3	08-89	288	MIDALE SOUTH VOLUNTARY UNIT NO. 2
MANNVILLE	PERIPHERAL	7	3	12-59	52	NORTH ALAMEDA UNIT
–	–	12	–	–	–	NORTH CANTAL UNIT
MANNVILLE	INV. 9-SPOT	6	1	11-78	33	NORTH CENTRAL WILLMAR VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	9	1	02-71	101	NORTH DALESBORO UNIT NO. 1
MANNVILLE	INV. 9-SPOT	20	1	07-84	4	NORTHGATE MIDALE VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	6	1	09-85	86	NORTHWEST BENSON MIDALE VOLUNTARY UNIT
–	–	23	–	–	–	NOTTINGHAM NORTH ALIDA BEDS UNIT
MANNVILLE	INV. 9-SPOT	47	13	12-66	518	OUNGRE VOLUNTARY UNIT NO. 1
–	–	3	–	–	–	QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	11	3	10-87	68	RALPH MIDALE BEDS VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	7	1	06-88	14	ROCANVILLE BAKKEN VOLUNTARY UNIT NO. 1
–	–	33	–	–	–	ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO 1.
MANNVILLE	INV. 9-SPOT	14	6	02-63	86	SOUTH ALAMEDA UNIT
MANNVILLE	PERIPHERAL	20	10	02-65	428	SOUTH PINTO UNIT
–	–	8	–	–	–	STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	11	2	09-83	406	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	13	0	12-86	0	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	95	36	09-58	1 226	STEELMAN UNIT NO. IA
MANNVILLE	INV. 9-SPOT	59	4	02-62	1 075	STEELMAN UNIT NO. II
MANNVILLE	INV. 9-SPOT	72	18	01-62	1 589	STEELMAN UNIT NO. III
MANNVILLE	INV. 9-SPOT	96	35	02-62	1 526	STEELMAN UNIT NO. IV
MANNVILLE	INV. 9-SPOT	25	3	02-62	96	STEELMAN UNIT NO. V
MANNVILLE	INV. 9-SPOT	101	33	02-62	2 364	STEELMAN UNIT NO. VI
MANNVILLE	INV. 9-SPOT	12	3	10-62	47	STEELMAN UNIT NO. VII
MANNVILLE	PERIPHERAL	2	1	06-88	86	TABLELAND VOLUNTARY UNIT NO. 1
PRODUCED WATER	PERIPHERAL	7	0	11-86	0	VIEWFIELD VOLUNTARY UNIT NO.1
MANNVILLE	INV. 9-SPOT	25	8	05-61	320	WEST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	580	147	04-64	11 552	WEYBURN UNIT
PRODUCED WATER	INV. 9-SPOT	3	1	03-88	12	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 5-SPOT	2	1	05-88	37	WEYCURN MIDALE BEDS VOLUNTARY UNIT NO. 3
MANNVILLE	INV. 9-SPOT	12	5	06-88	89	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 4
MANNVILLE	INV. 9-SPOT	9	3	06-88	101	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 5
MANNVILLE	INV. 9-SPOT	7	1	06-88	40	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 6
MANNVILLE	INV. 9-SPOT	17	4	06-88	75	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 7
MANNVILLE	INV. 9-SPOT	4	1	06-89	40	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 8
MANNVILLE	INV. 9-SPOT	30	8	02-68	485	WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	29	11	06-67	901	WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	3	1	04-68	30	WORKMAN-MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	PERIPHERAL	4	1	09-68	72	WORKMAN-MIDALE VOLUNTARY UNIT NO. 2

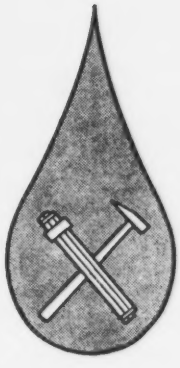
NON-UNITS – ENHANCED RECOVERY PROJECTS

POOL NAME	OPERATOR	PRODUCING ZONE	PROJECT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA I					
ABERFELDY G.P. SAND	HUSKY	G.P.	2-3-88	10-12-88	CONDUCTION HEATING
CELTIC WASECA SAND	MOBIL	WASECA & G.P.	12-8-77	8-31-84	STEAMFLOOD
EVESHAM NORTH MCLAREN SAND	SASKOIL	MCLAREN	7-25-89	–	PILOT WATERFLOOD
EYEHILL CUMMINGS SAND	MURPHY	CUMMINGS	12-8-77	5-15-84	IN-SITU COMBUSTION
GOLDEN LAKE SOUTH SPARKY SAND	HUSKY	SPARKY	11-6-68	5-31-83	IN-SITU WET COMB. (SUSP.)
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	3-19-81	6-6-84	IN-SITU WET COMB. (SUSP.)
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	2-8-82	–	IN-SITU OXYGEN WET-COMBUSTION (SUSP.)
LONE ROCK SPARKY SAND	ESSO RESOURCES	SPARKY	10-24-83	–	STEAMFLOOD
MISCELLANEOUS LLOYDMINSTER SAND	CANTERRA	LLOYDMINSTER	2-4-74	3-31-82	CYCLIC STEAM (SUSPENDED)
NEILBURG MCLAREN SAND	SASKOIL	MCLAREN	11-28-89	–	PILOT WATERFLOOD
PIKES PEAK WASECA SAND	HUSKY	WASECA	6-10-81	5-8-87	STEAMFLOOD & CYCLIC
SALT LAKE LLOYDMINSTER SAND	PETRO-CANADA	LLOYDMINSTER	6-13-88	–	WATERFLOOD
SENLAC LLOYDMINSTER SAND	SASKOIL	LLOYDMINSTER	3-23-88	11-17-89	WATERFLOOD
SILVERDALE SPARKY SAND	HOME	SPARKY	6-27-84	–	WATER ALTERNATING GAS
TANGLEFLAGS G.P. SAND	HUSKY	G.P.	11-30-83	–	IN-SITU WET COMB. (SUSP.)
TANGLEFLAGS NORTH LLOYD/CUMMINGS SAND	SCEPTRE	LLOYD/CUMMINGS	7-21-87	12-7-88	STEAMFLOOD/HORIZ. WELLS
AREA II					
BUFFALO COULEE BAKKEN SAND	SASKOIL	BAKKEN	11-28-69	11-17-89	WATERFLOOD
BUFFALO COULEE BAKKEN SAND	PAGE	BAKKEN	11-23-79	7-31-80	WATERFLOOD
BUFFALO COULEE NORTH BAKKEN SAND	SASKOIL	BAKKEN	6-28-88	–	PILOT WATERFLOOD
COLEVILLE BAKKEN	PHILLIPS	BAKKEN	12-18-58	5-29-86	WATERFLOOD
DODSLAND VIKING SAND	EUCLA	VIKING	3-5-85	–	WATERFLOOD (SUSPENDED)
DODSLAND VIKING SAND	WESTAR	VIKING	6-15-84	–	PILOT WATERFLOOD
DODSLAND VIKING SAND	CALANA	VIKING	12-4-85	–	WATERFLOOD
HEARTS HILL BAKKEN SAND	NORCEN	BAKKEN	11-2-89	–	WATERFLOOD
KERROBERT VIKING SAND	CN EXPLORATION	VIKING	12-3-85	10-13-88	WATERFLOOD
LUSELAND BAKKEN SAND	SASKOIL	BAKKEN	6-30-89	–	PILOT WATERFLOOD
SMILEY-DEWAR VIKING	ESSO RESOURCES	VIKING	9-22-61	5-2-86	WATERFLOOD
SMILEY-DEWAR VIKING	PETRO-CANADA	VIKING	1-30-73	11-1-73	WATERFLOOD
AREA III					
JAVA CANTUAR SAND	JARROD	CANTUAR	6-27-84	–	WATERFLOOD
AREA IV					
BENSON EAST MIDALE BEDS	MACEDON	MIDALE	12-2-87	–	WATERFLOOD
ELSWICK MIDALE BEDS	CAN. ROXY	MIDALE	6-10-87	–	WATERFLOOD
WEYBURN MIDALE BEDS	SASKOIL	MIDALE	6-13-88	–	WATERFLOOD

NON-UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/89 PROD.	ACTIVE WELLS 12/89 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/89 m3/DAY	POOL NAME
						AREA I
–	–	6	–	–	–	ABERFELDY G.P. SAND
SURFACE WATER	INV. 5 & 9-SPOT	26	–	10-80	–	CELTIC WASECA SAND
PRODUCED WATER	IRREGULAR	6	1	12-89	63	EVESHAM NORTH MCLAREN SAND
GLACIAL DRIFT	INV. 5-SPOT	17	–	06-80	–	EYEHILL CUMMINGS SAND
DINA SAND	INV. 7 & 9-SPOT	–	–	07-68	–	GOLDEN LAKE SOUTH SPARKY SAND
PRODUCED WATER	INV. 5-SPOT	–	–	04-82	–	GOLDEN LAKE SOUTH WASECA SAND
GLACIAL DRIFT	INV. 7-SPOT	–	–	07-82	–	GOLDEN LAKE SOUTH WASECA SAND
SURFACE WATER	INV. 7-SPOT	13	0	11-84	–	LONE ROCK SPARKY SAND
SURFACE WATER	–	–	–	07-74	–	MISCELLANEOUS LLOYDMINSTER SAND
SPARKY SAND	INV. 9-SPOT	8	1	12-89	93	NEILBURG MCLAREN SAND
SURFACE WATER	–	68	8	07-81	–	PIKES PEAK WASECA SAND
MANNVILLE	INV. 9-SPOT	39	8	06-88	830	SALT LAKE LLOYDMINSTER SAND
PRODUCED WATER	INV. 9-SPOT	62	5	07-88	133	SENLAC LLOYDMINSTER SAND
SPARKY SAND	–	9	3	12-85	83	SILVERDALE SPARKY SAND
SURFACE WATER	INV. 7-SPOT	–	–	02-85	–	TANGLEFLAGS G.P. SAND
SURFACE WATER	–	2	–	06-88	–	TANGLEFLAGS NORTH LLOYD/CUMMINGS SAND
						AREA II
BELLY RIVER	INV. 9-SPOT	15	4	07-69	307	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	17	7	06-80	227	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	10	1	06-88	119	BUFFALO COULEE NORTH BAKKEN SAND
BELLY RIVER	INV. 5 & 9-SPOT	238	98	01-59	5 776	COLEVILLE BAKKEN
B. RIVER & DEADWOOD	INV. 9-SPOT	–	–	07-85	–	DODSLAND VIKING SAND
BELLY RIVER	INV. 5-SPOT	9	4	11-85	38	DODSLAND VIKING SAND
B. RIVER & DEADWOOD	INV. 9-SPOT	40	6	12-87	148	DODSLAND VIKING SAND
PRODUCED WATER	PERIPHERAL	5	1	06-88	4	HEARTS HILL BAKKEN SAND
DUPEROW	INV. 5-SPOT	39	22	03-86	78	KERROBERT VIKING SAND
PRODUCED WATER	INV. 9-SPOT	8	1	08-89	70	LUSELAND BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	124	16	02-52	486	SMILEY-DEWAR VIKING
BELLY RIVER	INV. 9-SPOT	32	8	03-73	31	SMILEY-DEWAR VIKING
						AREA III
MANNVILLE	–	4	1	07-84	49	JAVA CANTUAR SAND
						AREA IV
MANNVILLE	INV. 9-SPOT	5	1	12-87	28	BENSON EAST MIDALE BEDS
MANNVILLE	INV. 9-SPOT	20	7	12-87	221	ELSWICK MIDALE BEDS
MANNVILLE	INV. 9-SPOT	3	1	06-88	58	WEYBURN MIDALE BEDS

DEVELOPMENT DATA



DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
ABERFELDY G.P. SAND	SOLUTION GAS DRIVE	CONDUCTION HEATING	1	SE 1/4 OF LSD.
ABERFELDY SPARKY SAND	SOLUTION GAS DRIVE WATER DRIVE PART. GAS CAP DRIVE	WATERFLOOD IN: 1: ABERFELDY UNIT (SUSPENDED) 2: SOUTH ABERFELDY SPARKY VOL. UNIT (SUSPENDED) IN-SITU WET COMBUSTION IN: ABERFELDY UNIT (SUSPENDED) STEAMFLOOD IN: ABERFELDY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: A: TWP 49, RGE 28, SEC: NW 1/4 OF 4, N 1/2 OF 5, 8, 9, W 1/2 OF 10, SW 1/4 OF 15, 16, 17, E 1/2 & NW 1/4 OF 18, 20, 21, 28, 29; TWP 48, RGE 27, SEC: N 1/2 OF 35, NW 1/4 OF 36; TWP 49, RGE 27, SEC: 1, 2, 11, 12; WHERE:
			1	NW 1/4 OF LSD; B: TWP 49, RGE 27, SEC: 14, 15, NE 1/4 OF 16, E 1/2 OF 21, 22, 23, 27, 28, 33, 34; WHERE:
			1	NE 1/4 OF LSD.
ALAMEDA MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: ALAMEDA CENTRAL UNIT 2: ALAMEDA EAST UNIT 3: NORTH ALAMEDA UNIT 4: SOUTH ALAMEDA UNIT	2	ODD NUMBERED LSD.
ALAMEDA WEST FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
ALAMEDA WEST MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: ALAMEDA WEST VOL. UNIT NO. 1	2	ODD NUMBERED LSD.
ALIDA EAST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 5, RGE 33, SEC: 26, 27, 28, S 1/2 OF 33, S 1/2 & NW 1/4 OF 34; TWP 6, RGE 33, SEC: SW 1/4 OF 3; WHERE:
			2	EVEN NUMBERED LSD.
ALIDA NORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ALIDA WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ALSASK BASAL BLAIRMORE SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 29, RGE 29, SEC: NW 1/4 OF 10, W 1/2 OF 15, SW 1/4 OF 22; WHERE: SEE POOL REGULATIONS CONCERNING PARTIAL LEGAL SUBDIVISIONS.
ANTELOPE LAKE EAST ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
ANTELOPE LAKE UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
ARCOLA FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	1	CENTRE OF LSD.
AUBURNTON FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
AVON HILL VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: AVON HILL VIKING VOL. UNIT	1	CENTER OF LSD.
BALDWINTON SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
BATTLE CREEK MADISON	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTLE CREEK SOUTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BATTLE CREEK UPPER SHAUNAVON	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTRUM EAST ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	EVEN NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
BATTRUM NORTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
BATTRUM ROSERAY SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	IN-SITU WET COMBUSTION IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM UNIT NO. 2 3: BATTRUM VOL. UNIT NO. 3 WATERFLOOD IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM VOL. UNIT NO. 3 3: BATTRUM UNIT NO. 4	1	CENTER OF LSD, EXCEPT: A: TWP 18, RGE 16, SEC: 30; TWP 18, RGE 17, SEC: 25, 26, E 1/2 OF 27, NE 1/4 OF 33, 34, 35, SE 1/4 & W 1/2 OF 36; WHERE: EVEN NUMBERED LSD; B: TWP 19, RGE 17, SEC: 1, S 1/2 OF 2; WHERE:
			2	ODD NUMBERED LSD.
BENCH UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BENSON EAST MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
BENSON FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BENSON MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: BENSON UNIT 2: BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1 3: BENSON MIDALE BEDS VOLUNTARY UNIT NO. 2 4: NORTHWEST BENSON MIDALE VOLUNTARY UNIT	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 6, RGE 7, SEC: NW 1/4 OF 19, SW 1/4 OF 30; TWP 6, RGE 8, SEC: N 1/2 OF 17, N 1/2 & SE 1/4 OF 18, 19, 20, W 1/2 & NE 1/4 OF 21, N 1/2 OF 22, 23, W 1/2 & NE 1/4 OF 24, S 1/2 OF 25, LSDS 9 & 10 & SE 1/4 OF 26, 27, S 1/2 & NE 1/4 OF 28, SW 1/4 OF 29, S 1/2 & NW 1/4 OF 30, W 1/2 OF 31, SE 1/4 OF 33, S 1/2 OF 34; TWP 6, RGE 9, SEC: SW 1/4 & NE 1/4 OF 13, NW 1/4 OF 15, 16, E 1/2 & NW 1/4 OF 17, 19, 20, 21, W 1/2 &NE 1/4 OF 22, W 1/2 & NE 1/4 OF 23, 24 TO 29 INCLUSIVE, S 1/2 OF 30, 36; TWP 6, RGE 10, SEC: E 1/2 OF 24, SE 1/4 OF 25; WHERE:
			2	ODD NUMBERED LSD.
BEVERLEY CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BEVERLEY CANTUAR VOL. UNIT NO. 1	2	EVEN NUMBERED LSD.
BEVERLEY EAST CANTUAR SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BEVERLEY NORTH CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BEVERLEY NORTH CANTUAR VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD, EXCEPT: TWP 15, RGE 17, SEC: LSD 10 OF 34, LSDS 3 & 4 OF 35; WHERE:
			1	CENTER OF LSD.
BEVERLEY UPPER ROSERAY SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: 1. BEVERLEY UNIT NO. 1 2. BEVERLEY VOL. UNIT NO. 2	1	CENTER OF LSD.
BIENFAIT MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BIG GULLY MCLAREN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE 1/4 OF 7, N 1/2 OF 8, SW 1/4 OF 17, SE 1/4 OF 18; WHERE:
			1	NE 1/4 OF LSD.
BIG GULLY NORTH LLOYD. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
BIG GULLY WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE 1/4 OF 7, N 1/2 OF 8, SW 1/4 OF 17, SE 1/4 OF 18; WHERE:
			1	NE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
BONE CREEK UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: BONE CREEK UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 11, RGE 19, SEC: W 1/2 OF 2, 3, E 1/2 OF 4; WHERE:
			2	ODD NUMBERED LSD.
BROMHEAD MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BROWNING FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 6, RGE 5, SEC: NE 1/4 OF 19, N 1/2 OF 20, 29, SE 1/4 OF 30, SE 1/4 OF 32; WHERE:
			1	CENTER OF LSD.
BRYANT FROBISHER BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BRYANT MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BUFFALO COULEE BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
BUFFALO COULEE NORTH BAKKEN SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD	1	SW 1/4 OF LSD.
BUTTE UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: BUTTE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
BUTTE WEST UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BUZZARD LLOYDMINSTER SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CACTUS LAKE BASAL MANNVILLE-BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1. CACTUS LAKE VOL. UNIT NO. 1 1. CACTUS LAKE VOL. UNIT NO. 2	1	CENTER OF LSD.
CANTAL FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
CANTAL SOUTH FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
CANTUAR EAST CANTUAR SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: EAST CANTUAR UNIT NO. 1 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR EAST ROSERAY SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: 1: EAST CANTUAR UNIT NO. 1 2: EAST CANTUAR UNIT NO. 2 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR LOWER ROSERAY SAND	WATER DRIVE	NONE	1	SW 1/4 OF LSD.
CANTUAR MAIN CANTUAR SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: CANTUAR UNIT	1	SW 1/4 OF LSD.
CANTUAR NORTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CARNDUFF FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: W 1/2 OF 5, 8; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 9, 10, 11, W 1/2 OF 12, W 1/2 OF 14, 15, 16; WHERE:
			2	EVEN NUMBERED LSD.
CARNDUFF MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEST CARNDUFF UNIT 2: EAST CARNDUFF UNIT 3: CARNDUFF VOLUNTARY UNIT NO. 1 4: CARNDUFF SOUTH MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: NE 1/4 & W 1/2 OF 4, 5, 6, 7, 8, 9, 16, 17, S 1/2 OF 18; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 11, 12, S 1/2 OF 13; WHERE:
			2	EVEN NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
CELTIC G.P. SAND	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD.
CELTIC MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CELTIC SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 52, RGE 23, SEC: S 1/2 OF 3; WHERE: 1 NW 1/4 OF LSD.
CELTIC WASECA SAND	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD, EXCEPT: TWP 52, RGE 23, SEC: SW 1/4 OF 10; WHERE: 1 NW 1/4 OF LSD.
CHAMBERY UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
CLARILAW FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CLARILAW WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
CLINTONVILLE SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
COLEVILLE BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
COLEVILLE MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD.
COLEVILLE SOUTH BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: COLEVILLE S. BAKKEN VOL. UNIT	1	NE 1/4 OF LSD.
COLEVILLE SOUTH MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD.
COLGATE MIDALE BEDS	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
COSINE LAKE LLOYDMINSTER SAND	GAS CAP DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 37, RGE 28, SEC: LSDS 4,5,12 & 13 OF 7, LSDS 4,5,12 & 13 OF 18, LSDS 4,5,12 & 13 OF 19; TWP 37, RGE 29, SEC: LSDS 1,8,9 & 16 OF 12, LSDS 1,8,9 & 16 OF 13, LSDS 1,8,9 & 16 OF 24; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.
COURT BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: COURT BAKKEN VOL. UNIT NO. 1	1	SE 1/4 OF LSD.
COVINGTON UPPER SHAUNAVON	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: COVINGTON UNIT NO. 1	2	EVEN NUMBERED LSD.
COVINGTON WEST UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
CRYSTAL HILL SOURIS VALLEY BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 10, RGE 1, SEC: 18 & 19; TWP 10, RGE 2, SEC: NE 1/4 OF 13, E 1/2 OF 24; WHERE: 1 CENTER OF LSD.
DALESBORO FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
DEE VALLEY EAST MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
DELTA UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DELTA UNIT NO. 1 2: DELTA UNIT NO. 2 3: DELTA VOL. UNIT NO. 3	2	EVEN NUMBERED LSD.
DODSLAND VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: EAGLE LAKE VIKING VOLUNTARY UNIT 2: EAST DODSLAND VOL. UNIT 3: GLENEATH SOUTH VOL. UNIT 4: GLENEATH UNIT 5: KIYIU LAKE VOLUNTARY UNIT 6: KIYIU LAKE VOL. UNIT NO. 2 7: NORTH DODSLAND VOL. UNIT	1	CENTER OF LSD.
DOLLARD LOWER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION, EXCEPT: TWP 7, RGE 19, SEC: NW 1/4 OF 29; WHERE:
			2	ODD NUMBERED LSD.
DOLLARD UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DOLLARD UNIT 2: EAST DOLLARD VOLUNTARY UNIT	2	ODD NUMBERED LSD, EXCEPT: TWP 7, RGE 19, SEC: N 1/2 OF 8, W 1/2 OF 18, 17, E 1/2 OF 18; TWP 7, RGE 20, SEC: S 1/2 OF 10, NE 1/4 OF 19, SW 1/4 OF 20, NW 1/4 OF 27, N 1/2 OF 28, SE 1/4 OF 30; WHERE:
			4	NW LSD OF 1/4 SECTION.
DRUID MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
DULWICH NORTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTH DULWICH VOLUNTARY UNIT (SUSPENDED)	1/2	NE & SW 1/4 OF LSD.
DULWICH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	EACH QUADRANT OF LSD.
EAR LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EASTBROOK UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
EASTEND SHAUNAVON	SOLUTION GAS DRIVE	NONE	?	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 19, SEC: 5, 6, 7, 8, W 1/2 OF 18; TWP 6, RGE 20, SEC: E 1/2 OF 1; WHERE:
			4	NW LSD IN 1/4 SECTION.
EDAM NORTH WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDAM WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDAM WEST MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 48, RGE 20, SEC: 19, W 1/2 OF 29, 30, 31, W 1/2 OF 32; TWP 48, RGE 21, SEC: NE 1/4 OF 23, 24, 25, E 1/2 OF 28, 36; TWP 49, RGE 20, SEC: 6, S 1/2 OF 7; TWP 49, RGE 21, SEC: 1, SE 1/4 OF 12; WHERE:
			1/2	NW & SE 1/4 OF LSD.
EDAM WEST SPARKY/G.P. SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: SEE EDAM WEST MANNVILLE SANDS.
EDAM WEST WASECA SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: SEE EDAM WEST MANNVILLE SANDS.
EDENVALE TILSTON BEDS	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
ELMORE FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
ELMORE MIDALE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
ELSWICK MIDALE BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
EPPING G.P. SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH EPPING UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: A: TWP 47, RGE 27, SEC: S 1/2 & NW 1/4 OF 31, SW 1/4 OF 32; TWP 48, RGE 27, SEC: SW 1/4 OF 6; TWP 47, RGE 28, SEC: N 1/2 OF 25, 34, 35, 36; TWP 48, RGE 28, SEC: S 1/2 OF 1, S 1/2 OF 2; WHERE: 1 NW 1/4 OF LSD; B: TWP 47, RGE 27, SEC: W 1/2 OF 17, 18, 19, 20, S 1/2 & NW 1/4 OF 29, 30; WHERE: 1/2 NW & SE 1/4 OF LSD.
EPPING SOUTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EPPING SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SOUTH EPPING UNIT NO. 1 2: SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: TWP 47, RGE 27, SEC: W 1/2 OF 17, 18, 19, 20, W 1/2 & SE 1/4 OF 29, 30, W 1/2 & SE 1/4 OF 31, SW 1/4 OF 32; TWP 48, RGE 27, SEC: SW 1/4 OF 6; TWP 47, RGE 28, SEC: N 1/2 OF 25, 34, 35, 36; TWP 48, RGE 28, SEC: S 1/2 OF 1, S 1/2 OF 2, SE 1/4 OF 3; WHERE: 1/2 NW & SE 1/4 OF LSD.
EUREKA VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH EUREKA UNIT 2: SOUTH EUREKA UNIT	1	CENTER OF LSD.
EVESHAM NORTH MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EVESHAM NORTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EVESHAM SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EYEHILL CUMMINGS SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	PILOT IN-SITU DRY COMBUSTION	1	CENTER OF LSD.
FERTILE TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
FERTILE TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
FLAT LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1 FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 2	4 2	SW LSD IN 1/4 SECTION, EXCEPT: A: TWP 1, RGE 16, SEC: N 1/2 OF 21; WHERE: ODD NUMBERED LSD; B: TWP 1, RGE 16, SEC: S 1/2 OF 1, S 1/2 OF 2, S 1/2 OF 3, S 1/2 OF 5, S 1/2 OF 6; WHERE: WELLS LOCATED A MINIMUM DISTANCE OF 1600 FEET FROM U.S. BORDER.
FLORENCE FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	SPACING REGULATIONS * TARGET AREA
FOREST BANK MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: A: TWP 48, RGE 24, SEC: 32; TWP 49, RGE 24, SEC: 6; WHERE: SE 1/4 OF LSD; B: TWP 49, RGE 24, SEC: 7, 18; TWP 49, RGE 25, SEC: 12, 13; WHERE: NE 1/4 OF LSD.
FOREST BANK SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE FOREST BANK MANNVILLE SANDS.
FOREST BANK WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE FOREST BANK MANNVILLE SANDS.
FORGAN VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTRE OF LSD.
FOSTERTON ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: FOSTERTON MAIN UNIT 2: FOSTERTON NORTHWEST UNIT (SUSPENDED) 3: WEST FOSTERTON VOLUNTARY UNIT IN-SITU WET COMBUSTION IN: FOSTERTON NORTHWEST UNIT	1 1	SW 1/4 OF LSD, EXCEPT: TWP 17, RGE 18, SEC: 4, E 1/2 OF 5, E 1/2 OF 8, 9, LSDS 1,2,3,4,8,9 & 16 OF 16, LSDS 1 & 2 OF 17; WHERE: CENTER OF LSD.
FOSTERTON SOUTH CANTUAR SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
FOSTERTON SOUTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
FREDA LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
FREEMONT SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREEMONT WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREESTONE FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 9, RGE 6, SEC: W 1/2 OF 7, W 1/2 OF 17, 18,19, W 1/2 OF 20; TWP 9, RGE 7, SEC: 11, 12, 13; WHERE: CENTER OF LSD.
FRYS EAST TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
FRYS TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
FURNESS SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
FUSILIER BAKKEN SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	1	CENTER OF LSD.
GAINSBOROUGH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	2	ODD NUMBERED LSD.
GAISBOROUGH NORTH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	1	CENTER OF LSD.
GLEN EWEN FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 2, RGE 1, SEC: LSD 1,2,3,4 OF SECTIONS 1 TO 5 INCLUSIVE; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
GLEN EWEN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: GLEN EWEN UNIT	2	ODD NUMBERED LSD, EXCEPT: A: TWP 2, RGE 1, SEC: N 1/2 OF 28, 32, S 1/2 OF 33, S 1/2 & NW 1/4 OF 34, SE 1/4 OF 35; TWP 3, RGE 1, SEC: NW 1/4 OF 8, N 1/2 OF 10, N 1/2 OF 11, NE 1/4 OF 12, S 1/2 OF 13, W 1/2 OF 15, SE 1/4 OF 16, W 1/2 & NE 1/4 OF 20, W 1/2 OF 22; WHERE: 4 SE LSD OF 1/4 SECTION; B: TWP 2, RGE 1, SEC: LSD 1,2,3,4 OF SECTIONS 1 TO 5 INCLUSIVE; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.
GOLDEN LAKE NORTH MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 19, 29, 30, E 1/2 & SW 1/4 OF 31, 32; TWP 48, RGE 24, SEC: NE 1/4 OF 24, SE 1/4 OF 25; WHERE: 1 SW 1/4 OF LSD.
GOLDEN LAKE NORTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: SEE GOLDEN LAKE NORTH MANNVILLE SANDS POOL.
GOLDEN LAKE NORTH WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: SEE GOLDEN LAKE NORTH MANNVILLE SANDS POOL.
GOLDEN LAKE SOUTH MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH SPARKY SAND	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION (SUSPENDED)	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH WASECA SAND	SOLUTION GAS DRIVE	TWO IN-SITU WET COMBUSTION PILOT PROJECTS-OXYGEN ENRICHED (SUSPENDED)	1	SE 1/4 OF LSD.
GRIFFIN FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
GULL LAKE BASAL CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: JOHNSTON UNIT 2: GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
GULL LAKE CENTRAL UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	2	SE 1/4 OF EVEN LSD.
GULL LAKE NORTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE N. SHAUNAVON UNIT	1	SE 1/4 OF LSD.
GULL LAKE SOUTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN GULL LAKE SOUTH VOLUNTARY UNIT NO. 1	4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 12, RGE 19, SEC: NE 1/4 OF 21, 22, 23, N 1/2 & SW 1/4 OF 24, SW 1/4 OF 26, S 1/2 OF 27, SE 1/4 OF 28; WHERE: 4 NE LSD OF 1/4 SECTION.
GULLY LAKE WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GULLY LAKE WASECA VOL. UNIT	1	SE 1/4 OF LSD.
HANDSWORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HARTAVEN FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
HASTINGS EAST FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HASTINGS FROBISHER BEDS	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: 1: HASTINGS FROBISHER UNIT 2: HASTINGS VOLUNTARY UNIT NO. 1 3: HASTINGS VOLUNTARY UNIT NO. 2	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 3, RGE 33, SEC: SE 1/4 & N 1/2 OF 10, 15, N 1/2 OF 16, 21, 22, S 1/2 OF 27, S 1/2 OF 28, LSDS 13,14 & NE 1/4 OF 31; TWP 4, RGE 33, SEC: LSDS 1,2,5,6 & N 1/2 OF 6, LSDS 3,4,5 & SE 1/4 OF 7; TWP 3, RGE 34, SEC: 21, 22, W 1/2 OF 26, 27, 28, 33, 34, SW 1/4 OF 35; TWP 4, RGE 34, SEC: LSDS 13,14 & NE 1/4 OF 1, 3, 4, NE 1/4 OF 9, N 1/2 OF 10, LSDS 5,6,7,8 & N 1/2 OF 11, LSDS 9,10 & S 1/2 OF 12, LSDS 1,2 & W 1/2 OF 14, N 1/2 & SW 1/4 OF 15, 16, SE 1/4 OF 21, S 1/2 & NE 1/4 OF 22, LSDS 3 & 4 OF 23; TWP 3, RGE 1, SEC: 25, 36; TWP 4, RGE 1, SEC: S 1/2 OF 1, LSDS 7,8 & N 1/2 OF 12, LSDS 11,12, NE 1/4 & S 1/2 OF 13, LSDS 7 & 8 OF 14, SE 1/4 OF 24; WHERE:
			1	CENTER OF LSD;
				B: TWP 4, RGE 34, SEC: SE 1/4 OF 9, SW 1/4 OF 10, NE 1/4 OF 21, NW 1/4 OF 22, W 1/2 OF 27, 28, 33, W 1/2 OF 34; WHERE: SEE MRO 138/84 A 97 RE FRACTIONAL LEGAL SUBDIVISIONS.
HASTINGS WEST FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HAZELWOOD SOUTH TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HAZELWOOD TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HAZELWOOD WEST TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HAZLET ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: HAZLET UNIT	2	EVEN NUMBERED LSD.
HEARTS HILL BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
HILLMOND G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
HILLMOND SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
HOFFER RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION, EXCEPT: A: TWP 1, RGE 15, SEC: 28, 29, S 1/2 OF 32, S 1/2 OF 33; WHERE:
			4	SW LSD OF 1/4 SECTION;
				B: TWP 1, RGE 15, SEC: 30; TWP 1, RGE 16, SEC: E 1/2 OF 25; WHERE:
			2	ODD NUMBERED LSD.
HOOSIER BAKKEN SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: HOOSIER BAKKEN VOL. UNIT NO. 1	1	CENTER OF LSD.
HUME FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUME MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 7, RGE 12, SEC: 31, W 1/2 OF 32; TWP 8, RGE 12, SEC: N 1/2 OF 3, SE 1/4 OF 4, S 1/2 OF 5, S 1/2 OF 6; WHERE:
			2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
HUMMINGBIRD BAKKEN SAND	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUMMINGBIRD BIRDBEAR	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUMMINGBIRD RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
HUNTOON FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUNTOON MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1 2: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2	4	SE LSD IN 1/4 SECTION, EXCEPT: TWP 6, RGE 9, SEC: N 1/2 OF 30, 31, 32, 33, 34; TWP 7, RGE 9, SEC: W 1/2 OF 2, 3, 4, E 1/2 OF 5, 10; TWP 6, RGE 10, SEC: N 1/2 OF 25, NE 1/4 OF 26, E 1/2 OF 33, 34, 35, 36; TWP 7, RGE 10, SEC: 4; WHERE:
			2	ODD NUMBERED LSD.
ILLERBRUN UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: ILLERBRUN VOLUNTARY UNIT	4	SE LSD IN 1/4 SECTION.
INGOLDSBY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
INGOLDSBY WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
INNES FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
INSTOW UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: INSTOW UNIT 2: INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	2	ODD NUMBERED LSD.
JAVA CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
JOHNSTON UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
KENOSEE TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
KERROBERT VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
KISBEY BIRDBEAR	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
KISBEY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
LAKE ALMA RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: LAKE ALMA VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
LANDROSE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: W 1/2 OF 6, W 1/2 OF 7, SW 1/4 OF 18; TWP 50 RGE 26, SEC: E 1/2 & NW 1/4 OF 1, 12, S 1/2 OF 13; WHERE:
			1/2	NE & SW 1/4 OF LSD.
LANDROSE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: W 1/2 OF 6, W 1/2 OF 7, SW 1/4 OF 18; TWP 50 RGE 26, SEC: E 1/2 & NW 1/4 OF 1, 12, S 1/2 OF 13; WHERE:
			1/2	NE & SW 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
LASHBURN SOUTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 18; TWP 48, RGE 24, SEC: NW 1/4 OF 14, NE 1/4 OF 15, E 1/2 OF 22, 23; WHERE:
			1	SE 1/4 OF LSD.
LASHBURN SOUTH WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE LASHBURN SOUTH SPARKY SAND POOL.
LASHBURN WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: LASHBURN WASECA VOLUNTARY UNIT (SUSPENDED)	1	SW 1/4 OF LSD.
LASHBURN WEST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
LEITCHVILLE SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 8, RGE 18, SEC: N 1/2 OF 31, N 1/2 OF 32 TWP 9, RGE 18, SEC: W 1/2 OF 4, 5, 6, 7, 8, 9, W 1/2 OF 10, S 1/2 & NW 1/4 OF 16, 17, 18, S 1/2 OF 19, S 1/2 OF 20; WHERE:
			2	EVEN NUMBERED LSD.
LEON LAKE SHAUNAVON	SOLUTION GAS DRIVE	PILOT WATERFLOOD WATERFLOOD	4	SE LSD OF 1/4 SECTION.
LIGHTNING TILSTON BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
LLOYDMINSTER SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD, EXCEPT: SPECIAL PROVISIONS FOR PARTIAL LSD.
LONE ROCK SPARKY SAND	SOLUTION GAS DRIVE	PILOT STEAMFLOOD	1/4	CENTER OF EACH 1/4 LSD.
LOST HORSE HILL FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 9, RGE 8, SEC: LSDS 5,6,7,8,11,12 & NE 1/4 OF 32, LSDS 13,14,15, & 16 OF 33; TWP 10, RGE 8, SEC: LSDS 5,6 & NW 1/4 OF 3, LSDS 11, 12 & S 1/2 & NE 1/4 OF 4, LSDS 3 & 4 OF 10, 11, 12, SW 1/4 OF 13, S 1/2 OF 14, SE 1/4 OF 15; WHERE:
			1	CENTER OF LSD.
LOUGHEED MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
LOVERNA DETRITAL	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
LOW LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1/2	NE & SW 1/4 OF LSD.
LUCKY HILLS VIKING	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 30, RGE 23, SEC: W 1/2 OF 18, W 1/2 & NE 1/4 OF 19, N 1/2 OF 20, S 1/2 OF 28, S 1/2 OF 29, S 1/2 OF 30; WHERE:
			1	CENTER OF LSD.
LUSELAND BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MACKLIN SPARKY SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD	1	CENTER OF LSD.
MACOUN MIDALE BEDS	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MACOUN WEST MIDALE BEDS	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MAIDSTONE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
MAIDSTONE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIN SUCCESS ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS MAIN UNIT	1	SW 1/4 OF LSD.
MANITO LAKE SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MARSDEN SOUTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1 2: MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 2	1	SE 1/4 OF LSD.
MARSDEN SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
MELROSE FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MIDALE CENTRAL FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
MIDALE CENTRAL MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: MIDALE UNIT 2: MIDALE SOUTH VOL. UNIT NO. 1 3: MIDALE SOUTH VOL. UNIT NO. 2 PILOT CARBON DIOXIDE FLOOD IN: MIDALE UNIT (SUSPENDED)	2	ODD NUMBERED LSD.
MINARD MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MOOSE MOUNTAIN TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MOOSE VALLEY SOUTH TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
MOOSE VALLEY TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MORRISVIEW FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NEILBURG MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NEPTUNE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	CENTER OF 1/4 SECTION.
NORTH ANTLER MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTLER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
NORTHGATE FROBISHER BEDS	WATER DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
NORTHGATE MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHGATE MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
NORTH HANDSWORTH ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NORTH HOOSIER BAKKEN SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	1	CENTER OF LSD.
NORTH HOOSIER BASAL BLAIRMORE	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	1/2	SW & NE 1/4 OF LSD.
NORTHMINSTER NORTH G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTHMINSTER NORTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTHMINSTER SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHMINSTER SPARKY VOLUNTARY UNIT	1 1	SW 1/4 OF LSD, EXCEPT: TWP 50, RGE 27, SEC: NW 1/4 OF 2, 11, LSDS 12,13,14,15 & 16 OF 12, S 1/2 & NW 1/4 OF 13, 14, N 1/2 OF 19, NW 1/4 OF 20, W 1/2 OF 29, 30, 31; TWP 50, RGE 28, SEC: E 1/2 OF 36; WHERE: SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	SPACING REGULATIONS * TARGET AREA
NORTH PREMIER ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UNIT NO. 1 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD.
NORTH PREMIER UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD, EXCEPT: TWP 14, RGE 19, SEC: 26, E 1/2 OF 27, 34, 35, 36; TWP 15, RGE 18, SEC: W 1/2 OF 6; WHERE:
			2	SW 1/4 OF ODD LSD.
NORTH SMILEY BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NOTTINGHAM ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
NOTUKEU UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION.
OAKLEY FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
OUNGRE RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: OUNGRE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD, EXCEPT: TWP 2, RGE 14, SEC: N 1/2 OF 14, NW 1/4 OF 15, NE 1/4 OF 16, N 1/2 OF 19, N 1/2 & SE 1/4 OF 20, 21, 22, 23, 26 TO 30, SE 1/4 OF 31, S 1/2 OF 32, SW 1/4 OF 33; TWP 2, RGE 15, SEC: NE 1/4 OF 25; WHERE:
			1	CENTER OF LSD.
PARKMAN SOURIS VALLEY BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PARKMAN SOUTH TILSTON-SOURIS VALLEY	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PARKMAN TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
PARKMAN TILSTON-SOURIS VALLEY	WATER DRIVE	NONE	1	CENTER OF LSD.
PENNANT UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: PENNANT UPPER SHAUNAVON VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
PIKES PEAK G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK WASECA SAND	SOLUTION GAS DRIVE	CYCLIC STEAM STIMULATION	1	SE 1/4 OF LSD.
PINTO FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 2, RGE 4, SEC: 5; WHERE:
			2	ODD NUMBERED LSD; B: TWP 2, RGE 4, SEC: NW 1/4 OF 2, S 1/2 OF 11; WHERE:
			1	CENTER OF LSD.
PINTO MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH PINTO UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 2, RGE 4, SEC: 5; WHERE:
			2	ODD NUMBERED LSD.
PLATO NORTH VIKING	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
PLATO VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: PLATO VIKING VOLUNTARY UNIT NO. 1	1	CENTER OF LSD.
PLENTY VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
PLOVER LAKE BAKKEN SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD (SUSPENDED)	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
PLOVER LAKE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 35, RGE 27, SEC: LSD 15 OF 35; TWP 36, RGE 27, SEC: LSDS 1 & 2 OF 2; WHERE:
			1/2	NW & SE 1/4 OF LSD.
PRAIRIEDALE VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTRE OF LSD.
QUEENSDALE EAST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE NORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE WEST ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
RALPH MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: RALPH MIDALE BEDS VOL. UNIT	2	ODD NUMBERED LSD.
RALPH WEST MIDALE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
RAPDAN UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: RAPDAN UNIT 2: NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT 3: RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2 PILOT POLYMER FLOOD IN: RAPDAN UNIT	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 3, RGE 20, SEC: NE 1/4 OF 32, NW 1/4 OF 33; TWP 4, RGE 20, SEC: W 1/2 OF 4, E 1/2 OF 5, E 1/2 OF 8, W 1/2 OF 9, SW 1/4 OF 16, SE 1/4 OF 17; WHERE:
			4	NE LSD IN 1/4 SECTION; B: TWP 4, RGE 19, SEC: E 1/2 & NW 1/4 OF 30, 31, 32; TWP 4, RGE 20, SEC: 26, 35, S 1/2 & NE 1/4 OF 36; TWP 5, RGE 19, SEC: 5, W 1/2 & NE 1/4 OF 7, 8; TWP 5, RGE 20, SEC: W 1/2 OF 1, 2, 12; WHERE:
			4	SW LSD IN 1/4 SECTION.
RAPDAN WEST SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
RED JACKET GRAVELBOURG	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RED JACKET SHAUNAVON-GRAVELBOURG	WATER DRIVE	NONE	1	CENTER OF LSD.
ROCANVILLE BAKKEN SAND	PARTIAL WATER DRIVE	NONE	1	CENTER OF LSD.
RONCOTT BAKKEN SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
ROSEBANK ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ROSEBANK SOUTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
RUSH LAKE MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SALT LAKE LLOYDMINSTER SAND	SOLUTION GAS DRIVE	WATERFLOOD	1	SE 1/4 OF LSD.
SENLAC LLOYDMINSTER SAND	SOLUTION GAS DRIVE	WATERFLOOD	1	SE 1/4 OF LSD.
SHERWOOD FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 1, RGE 31, SEC: LSDS 1,2,3 & 4 OF 8, TWP 1, RGE 32, SEC: LSDS 1,2,3 & 4 OF 1, LSDS 1,2,3 & 4 OF 2; WHERE:
			1	CENTRE OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	SPACING REGULATIONS * TARGET AREA
SILVERDALE SPARKY SAND	SOLUTION GAS DRIVE	PILOT WATER ALTERNATING GAS INJECTION	1/4	CENTER OF EACH 1/4 LSD, EXCEPT: A: TWP 49, RGE 26, SEC: LSDS 3,6,11,14 & E 1/2 OF 14, LSDS 3,6,11,14 & SE 1/4 OF 23; WHERE:
			1	CENTRE OF LSD; B: TWP 49, RGE 27, SEC: N 1/2 OF 6; TWP 48, RGE 26, SEC: LSDS 4,5,12 & 13 OF 14, LSDS 1,8,9 & 16 OF 15, LSDS 1,8,9 & 16 OF 22, LSDS 4,5,12 & 13 OF 23, LSDS 1,8,9 & 16 OF 27, LSDS 1,8, 9 & 16 OF 34; TWP 49, RGE 26, SEC: LSDS 1,8,9, & 16 OF 3, LSDS 1,8,9 & 16 OF 10, LSDS 1,8,9 & 16 OF 15; WHERE: SPECIAL PROVISIONS FOR PARTIAL SECTIONS.
SILVERTON FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
SKINNER LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 4, RGE 17, SEC: W 1/2 & NE 1/4 OF 8, 9, 10, W 1/2 OF 11, SW 1/4 OF 14, S 1/2 OF 15, S 1/2 OF 16, NE 1/4 OF 19, NW 1/4 OF 20; TWP 4, RGE 18, SEC: SW 1/4 OF 25, SE 1/4 OF 26; WHERE:
			2	ODD NUMBERED LSD.
SMILEY-DEWAR VIKING	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
SOURIS FLAT FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SOUTH FLETWODE TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
SOUTH SUCCESS ROSERAY SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: SUCCESS UNIT	1	SW 1/4 OF LSD.
STANDARD HILL WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
STAR VALLEY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
STEELMAN FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STEELMAN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: STEELMAN UNIT NO. 1A 2: STEELMAN UNIT NO. 2 3: STEELMAN UNIT NO. 3 4: STEELMAN UNIT NO. 4 5: STEELMAN UNIT NO. 5 6: STEELMAN UNIT NO. 6 7: STEELMAN UNIT NO. 7 8: LAMPMAN UNIT 9: DOUGLASTON MIDALE BEDS UNIT 10: STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1 11: STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	2	ODD NUMBERED LSD.
STORTHOAKS ALIDA-TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
STOUGHTON FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STOUGHTON SOUTH FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SUCCESS NORTH ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS NORTH ROSERAY VOLUNTARY UNIT	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
SUCCESS ROSERAY SAND ALPHA	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS ALPHA UNIT	1	SW 1/4 OF LSD.
SUFFIELD ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 1 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSD, EXCEPT: TWP 14, RGE 19, SEC: 17, E 1/2 & NW 1/4 OF 18, S 1/2 OF 19, S 1/2 OF 20; WHERE:
			1	CENTER OF LSD.
SUFFIELD UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 2 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSD.
TABLELAND WINNIPEGOSIS	SOLUTION GAS DRIVE	WATERFLOOD IN: TABLELAND VOL. UNIT NO. 1	4	SE LSD OF 1/4 SECTION.
TANGLEFLAGS EAST MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS G.P. SAND	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION (SUSPENDED)	1	SE 1/4 OF LSD.
TANGLEFLAGS LLOYDMINSTER SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: TANGLEFLAGS VOL. UNIT NO. 2	1	SE 1/4 OF LSD.
TANGLEFLAGS MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH LLOYD/ CUMMINGS SAND	SOLUTION GAS DRIVE	STEAMFLOOD/HORIZONTAL WELLS	1	SE 1/4 OF LSD.
TANGLEFLAGS SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST LLOYD. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TATAGWA MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 5, RGE 15, SEC: LSDS 7 & 8 OF 32, LSDS 5,8,11 & 12 OF 33; WHERE:
			1	CENTER OF LSD.
TATAGWA NORTH MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
VERENDRYE VIKING SAND	SOLUTION GSA DRIVE	NONE	1	CENTER OF LSD.
VERLO ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: VERLO ROSERAY SAND UNIT	2	EVEN NUMBERED LSD.
VIEWFIELD FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: VIEWFIELD VOL. UNIT NO. 1	1	CENTER OF LSD.
VIEW HILL MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAPELLA SAND	WATER DRIVE	NONE	1	CENTER OF LSD.
WARMLEY ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAUCHOPE ALIDA-TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WAUCHOPE NORTH TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WEIR HILL FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEST INNES FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	SPACING REGULATIONS * TARGET AREA
WEST KINGSFORD MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WESTHAZEL G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WESTHAZEL SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WEYBURN FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: SEE: WEYBURN MIDALE BEDS.
WEYBURN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEYBURN UNIT 2: WEYBURN MIDALE VOL. UNIT NO. 2 3: WEYBURN MIDALE VOL. UNIT NO. 3 4: WEYBURN MIDALE VOL. UNIT NO. 4 5: WEYBURN MIDALE VOL. UNIT NO. 5 6: WEYBURN MIDALE VOL. UNIT NO. 6 7: WEYBURN MIDALE VOL. UNIT NO. 7 8: WEYBURN MIDALE VOL. UNIT NO. 8	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 11, SEC: W 1/2 OF 31; TWP 7, RGE 11, SEC: 5, 6, 7, 8; TWP 5, RGE 12, SEC: NW 1/4 OF 35; TWP 6, RGE 12, SEC: LSDS 13 & 14 OF 1, NE 1/4 & W 1/2 & LSDS 7 & 8 OF 2, 11, W 1/2 OF 12, 13, 14, NE 1/4 OF 22, 23, 24, 25, 26, 27, 33, 34, 35, 36; TWP 7, RGE 12, SEC: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, W 1/2 OF 14, 15, 16, 17, 18, 19, 20, 21, 22, W 1/2 OF 23; TWP 7, RGE 13, SEC: E 1/2 OF 1, E 1/2 OF 12, E 1/2 OF 13, E 1/2 OF 24; TWP 6, RGE 14, SEC: 28, 33; TWP 7, RGE 14, SEC: N 1/2 OF 2, 3, 4, 10, 11, W 1/2 OF 12; WHERE: ODD NUMBERED LSD.
WHITE BEAR TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITE BEAR TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITEMUD SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
WHITESIDE VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: WHITESIDE VIK. VOL. UNIT (SUSP.)	1	CENTER OF LSD.
WILDWOOD ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
WILLMAR FROBISHER-ALIDA BEDS	WATER DRIVE SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: 1: WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1 2: NORTH DALESBORO UNIT NO. 1 3: NORTH CENTRAL WILLMAR VOLUNTARY UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 5, RGE 2, SEC: 31, 32, N 1/2 OF 33, NW 1/4 OF 34; TWP 6, RGE 2, SEC: SW 1/4 OF 3, S 1/2 OF 4, 6, S 1/2 & NE 1/4 OF 7, SW 1/4 OF 8; TWP 5, RGE 3, SEC: NE 1/4 OF 25, 35, 36; TWP 6, RGE 3, SEC: 1, S 1/2 & NE 1/4 OF 2, SE 1/4 OF 12; WHERE:
			1	CENTER OF LSD.
WINMORE FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WINTER CUMMINGS SAND	SOLUTION GAS DRIVE	HORIZONTAL WELLS	1	CENTER OF LSD.
WORDSWORTH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
WORKMAN FROBISHER BEDS	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: WORKMAN FROBISHER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
WORKMAN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WORKMAN MIDALE VOL. UNIT NO. 1 2: WORKMAN MIDALE VOL. UNIT NO. 2	2	ODD NUMBERED LSD.

* SPACING REGULATIONS IN EFFECT ON JANUARY 1,1990.

GAS POOL DEVELOPMENT DATA

POOL NAME	SPACING REGULATIONS * DRAINAGE UNIT SECTIONS	TARGET AREA
BAYHURST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BAYHURST WEST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEACON HILL MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEACON HILL WEST MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEVERLEY EAST CANTUAR GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BIGSTICK SECOND WHITE SPECKS GAS POOL	1 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE), EXCEPT: A: TWP 12, RGE 25, SEC: 17 TO 20, 29 TO 32; TWP 13, RGE 25, SEC: 5 TO 8; TWP 12, RGE 26, SEC: 13, 14, 21 TO 28, 33 TO 36; TWP 13, RGE 26, SEC: 4, 5; TWP 13, RGE 28, SEC: 17, 18, 19, 29, 30; TWP 13, RGE 29, SEC: 13 TO 36; TWP 13, RGE 30, SEC: 13, 24, 25, 36; TWP 14, RGE 30, SEC: 1, 12, 13, 24, 25, 36; WHERE: CENTRE OF NE AND SW 1/4 OF SECTION. B: TWP 12, RGE 27, SEC: 28 TO33; TWP 13, RGE 27, SEC: 4 TO 9, 15 TO 21, 28 TO 30; TWP 12, RGE 28, SEC: 25 TO 27, 33 TO 36; TWP 13, RGE 28, SEC: 1 TO 5, 8 TO 16, 20 TO 28; WHERE: NE CORNER OF NE AND SW 1/4 OF SECTION. C: TWP 13, RGE 30, SEC: 14, 23, 26, 35; TWP 14, RGE 30, SEC: 2, 11, 14, 23, 26, 35; TWP 15, RGE 30, SEC: 1, 12; WHERE: SEE POOL REGULATIONS RE PARTIAL SECTIONS.
BROCK EAST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BROCK VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BRONSON LAKE COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BRONSON LAKE WASECA SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BURSTALL MEDICINE HAT SAND GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 19, RGE 29, SEC: 6, 7, 18, 19, 30, 31; TWP 20, RGE 29, SEC: 6; WHERE: SEE POOL REGULATIONS RE PARTIAL SECTIONS.
BURSTALL MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 19, RGE 29, SEC: 6, 7, 18, 19, 30, 31; TWP 20, RGE 29, SEC: 6; WHERE: SEE POOL REGULATIONS RE PARTIAL SECTIONS.
BURSTALL MILK RIVER-MEDICINE HAT GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 19, RGE 29, SEC: 6, 7, 18, 19, 30, 31; TWP 20, RGE 29, SEC: 6; WHERE: SEE POOL REGULATIONS RE PARTIAL SECTIONS.
BURSTALL NORTH VIKING SAND GAS	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CAVALIER SPINNEY HILL SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
COLEVILLE-SMILEY VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CONSUL SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CONSUL UPPER SHAUNAVON GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CRANE LAKE MILK RIVER GAS POOL	1/4 1/2	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: A: TWP 13, RGE 25, SEC: 4 TO 9, 17 TO 20, 29 TO 32; WHERE: CENTRE OF DRAINAGE UNIT. B: TWP 13, RGE 25, SEC: 1 TO 3, 10 TO 16, 21 TO 28, 33 TO 36; WHERE: CENTRE OF NE AND SW 1/4 OF SECTION.

GAS POOL DEVELOPMENT DATA

POOL NAME	SPACING REGULATIONS * DRAINAGE UNIT SECTIONS	TARGET AREA
CRANE LAKE SOUTH MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 12, RGE 21, SEC: 31; TWP 13, RGE 21, SEC: 6, 7, 18; TWP 12, RGE 22, SEC: 30, 31 & 33 TO 36; TWP 13, RGE 22, SEC: 1 TO 5, 8 TO 16, 21, 22, & 28 TO 33; TWP 14, RGE 22, SEC: 4, 5; TWP 12, RGE 23, SEC: 19 TO 28, 35, 36; TWP 13, RGE 23, SEC: 25, 26, 27, 34, 35, 36; WHERE: CENTRE OF DRAINAGE UNIT.
CRANE LAKE SOUTH SECOND WHITE SPECKS GAS POOL	1 1/2	CENTRE OF DRAINAGE UNIT, EXCEPT: TWP 12, RGE 21, SEC: 31; TWP 13, RGE 21, SEC: 6, 7, 18; TWP 12, RGE 22, SEC: 30, 31 & 33 TO 36; TWP 13, RGE 22, SEC: 1 TO 5, 8 TO 16, 21,22, & 27 TO 30; TWP 12, RGE 23, SEC: 19 TO 28, 35, 36; TWP 13, RGE 23, SEC: 25, 26, 27; WHERE: CENTRE OF NE AND SW 1/4 OF SECTION.
DODSLAND NORTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DRIVER BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DRIVER MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FLAT VALLEY COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FLAT VALLEY ST. WALBURG SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT NORTH COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT NORTH WASECA SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FREEFIGHT MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 16, RGE 23, SEC: 19, 30, 31; TWP 17, RGE 23, SEC: 6, 7; TWP 15, RGE 24, SEC: 1, E 1/2 OF 2, NE 1/4 OF 10, 11 TO 14, E 1/2 OF 15, E 1/2 OF 22, 23 TO 25, E 1/2 OF 27; TWP 16, RGE 24, SEC: 26, E 1/2 OF 27, E 1/2 OF 34, 35, 36; WHERE: SEE POOL REGULATIONS.
FRENCHMAN BUTTE COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FRENCHMAN BUTTE ST. WALBURG SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FRENCHMAN BUTTE WASECA SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GUDDEN VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GREENAN VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GULL LAKE CANTUAR GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
HATTON MEDICINE HAT SAND GAS POOL	1/4, 1/2, 1	VARIABLE, SEE POOL REGULATIONS FOR DETAILS.
HATTON MILK RIVER GAS POOL	1/4, 1/2, 1	VARIABLE, SEE POOL REGULATIONS FOR DETAILS.
HATTON MILK RIVER-MEDICINE HAT GAS POOL	1/4, 1/2, 1	VARIABLE, SEE POOL REGULATIONS FOR DETAILS.
HOOSIER VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
INGEBRIGT MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
LIEBENTHAL MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 19, RGE 25, SEC: 1 TO 4, 9 TO 16, 21 TO 28, & 33 TO 36; TWP 20, RGE 25, SEC: 1 TO 4; WHERE: CENTRE OF DRAINAGE UNIT.
LLOYDMINSTER COLONY SAND GAS POOL	1/4	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).

GAS POOL DEVELOPMENT DATA

POOL NAME	SPACING REGULATIONS * DRAINAGE UNIT SECTIONS	TARGET AREA
LOVERNA NORTH MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA SOUTH BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA SOUTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA WEST BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE), EXCEPT: TWP 31, RGE 29, SEC: 26 & 35; WHERE: SEE POOL REGULATIONS RE PARTIAL SECTIONS.
MAKWA MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
MARENGO VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
MILTON VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
PECK LAKE COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
PIERCELAND MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
SENATE SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
SUPERB BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS MCLAREN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS ST. WALBURG SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TOTNES VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
UNITY SOUTH UNITY GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
UNITY SOUTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHEAT VALLEY CANTUAR SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE RIBSTONE CREEK SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE WEST RIBSTONE CREEK SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE WEST VIKING SAND GAS POOL	1/2	NORTHWEST & SOUTHEAST 1/4 OF SECTION, EXCEPT: TWP 30, RGE 26, SEC: 18 & 19; TWP 30, RGE 27, SEC: 13; WHERE : NORTHEAST & SOUTHWEST 1/4 OF SECTION.

* SPACING REGULATIONS IN EFFECT ON JANUARY 1, 1960.

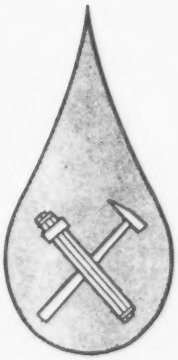
AREA SPACING DESCRIPTION*

SPACING AREA	DRAINAGE UNIT SIZE (No. of Lsds)	TARGET AREA	EXCEPTIONS
		- OIL AREAS -	
A	2	Odd numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
B	2	Even numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
C	4	Any quadrant of a quarter section.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
D	2	Odd or even Lsds.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
E	1	Southeast quadrant of the Lsd.	Wells drilled within a corridor of 1609 metres around an established oil pool shall take on the spacing of this pool. Applies only to wells drilled within the Mannville Group, Detrital, Bakken or Birdbear Formations.
		- GAS AREAS -	
G	16	Odd or even Lsds.	Wells drilled within a 9 section square area centred on a section that contains a gas well shall be drilled at least 500 metres from the sides of the drainage unit. Applies only to Mannville Formation.

* See the Oil and Gas Conservation Act & Regulations Thereunder for complete area spacing regulations.

TYPICAL WELL LOGS

OF PRODUCING ZONES



LITHOLOGY LEGEND

Silt

Shale

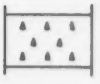
Sandstone

Limestone

Calcareous shale

Argillaceous sandstone

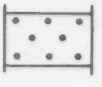
Coal

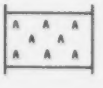
Chert pebbles 

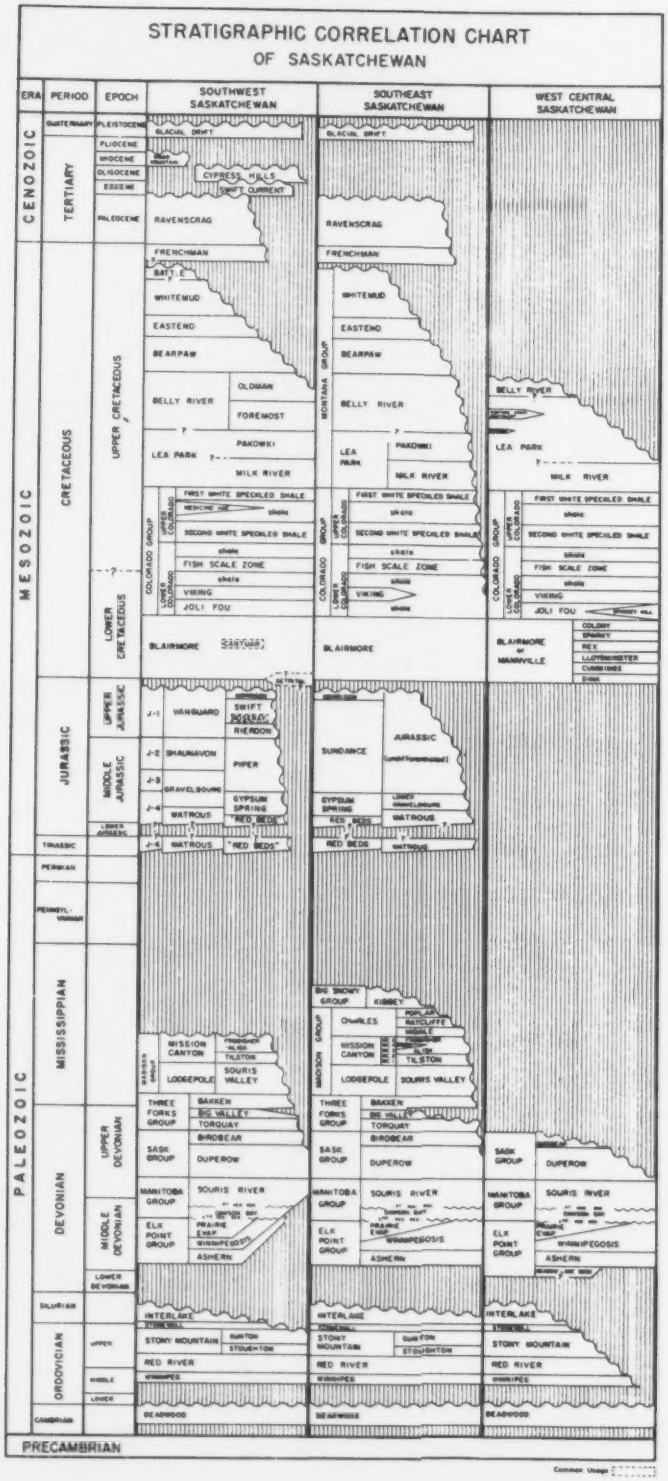
Interbedded shale and sandstone

Dolomite or dolomitic limestone

Argillaceous and anhydritic dolomite

Oolitic 

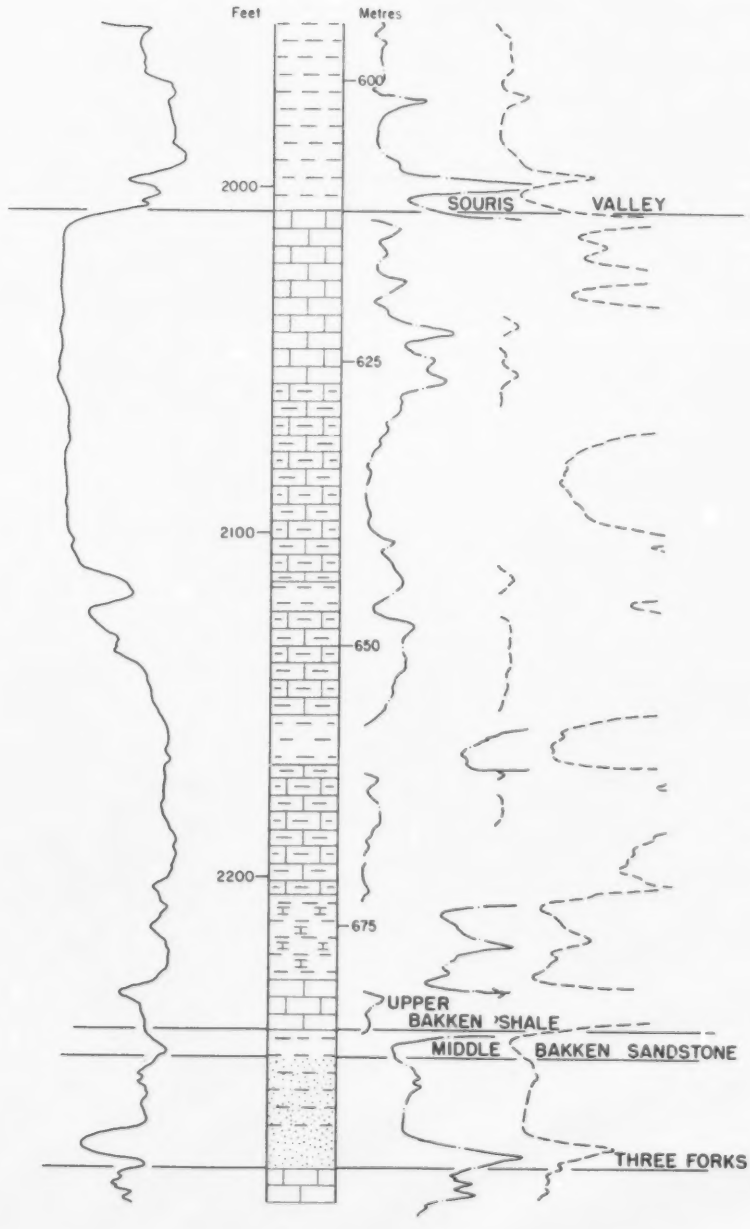
Anhydrite 


STRATIGRAPHIC CORRELATION CHART
OF SASKATCHEWAN
ERA
PERIOD
EPOCH
SOUTHWEST SASKATCHEWAN
SOUTHEAST SASKATCHEWAN
WEST CENTRAL SASKATCHEWAN
CENOZOIC
MESOZOIC
PALEOZOIC
PRECAMBRIAN
QUATERNARY
PLEISTOCENE
TERTIARY
PLIOCENE
MIOCENE
OLIGOCENE
EOCENE
PALEOCENE
CRETACEOUS
UPPER CRETACEOUS
LOWER CRETACEOUS
JURASSIC
UPPER JURASSIC
MIDDLE JURASSIC
LOWER JURASSIC
TRIASSIC
PERMIAN
PENNSYLVANIAN
MISSISSIPPIAN
DEVONIAN
UPPER DEVONIAN
MIDDLE DEVONIAN
LOWER DEVONIAN
SILURIAN
ORDOVICIAN
UPPER
MIDDLE
LOWER
CAMBRIAN
GLACIAL DRIFT
CYPRESS HILLS
SWIFT CURRENT
RAVENSCRAG
FRENCHMAN
BATTLE
WHITEMUD
EASTEND
BEARPAW
BELLY RIVER
OLDMAN
FOREMOST
LEA PARK
PAKOWKI
MILK RIVER
MONTANA GROUP
COLORADO GROUP
UPPER COLORADO
LOWER COLORADO
FIRST WHITE SPECKLED SHALE
SECOND WHITE SPECKLED SHALE
FISH SCALE ZONE
VIKING
JOLI FOU
BLAIRMORE
COLONY
SPARKY
REX
LLOYDMINSTER
CUMMINGS
DINA
BLAIRMORE or MANNVILLE
J-1
J-2
J-3
J-4
J-5
VANGUARD
SWIFT
MORRIN
RIVERTON
SHAUNAVON
PIPER
GRAVELBOURG
GYPSUM SPRING
WATROUS
"RED BEDS"
SUNDANCE
JURASSIC
RED BEDS
BIG SNOWY GROUP
KIBBEY
CHARLES
MISSION CANYON
LODGEPOLE
MADISON GROUP
BAKKEN
TILSTON
SOURIS VALLEY
THREE FORKS GROUP
BIG VALLEY
TORQUAY
BIRDBEAR
SASK GROUP
DUPEROW
MANITOBA GROUP
SOURIS RIVER
ELK POINT GROUP
PRAIRIE EVAPORITE
WINNIPEGOSIS
ASHERN
INTERLAKE
STONY MOUNTAIN
GUNTON
STOUGHTON
RED RIVER
WINNIPEG
BEAVERHILL LAKE
DEADWOOD
Common Usage

HUDSON ROCANVILLE 4-4

4-4-16-31-W1

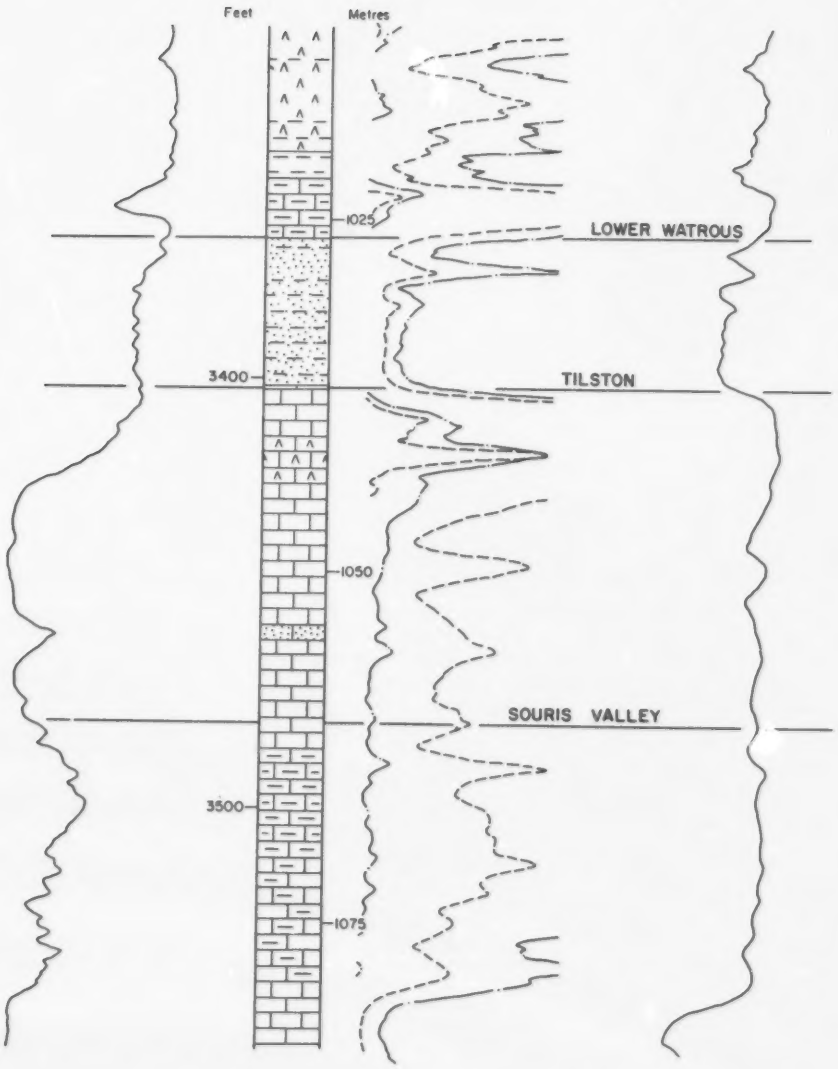
PRODUCING HORIZON : BAKKEN SAND



SCEPTRE PARKMAN 2-3

2-3-9-33-W1

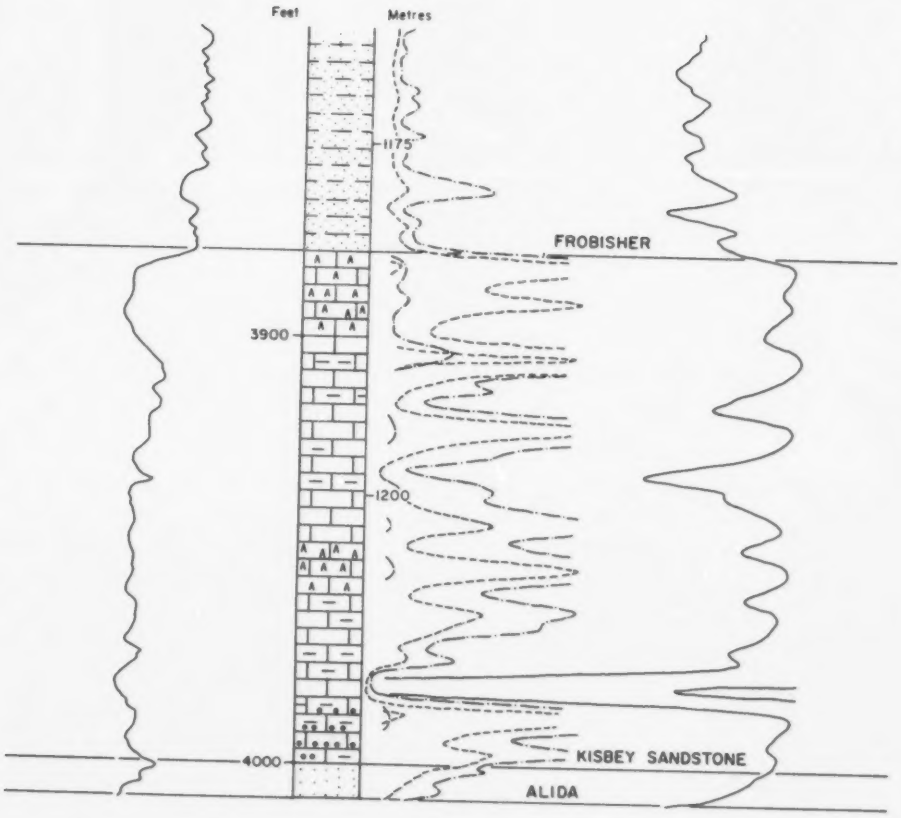
PRODUCING HORIZONS : TILSTON AND SOURIS VALLEY BEDS



MURPHY HASTINGS 7-24-4-34

7-24-4-34-W1

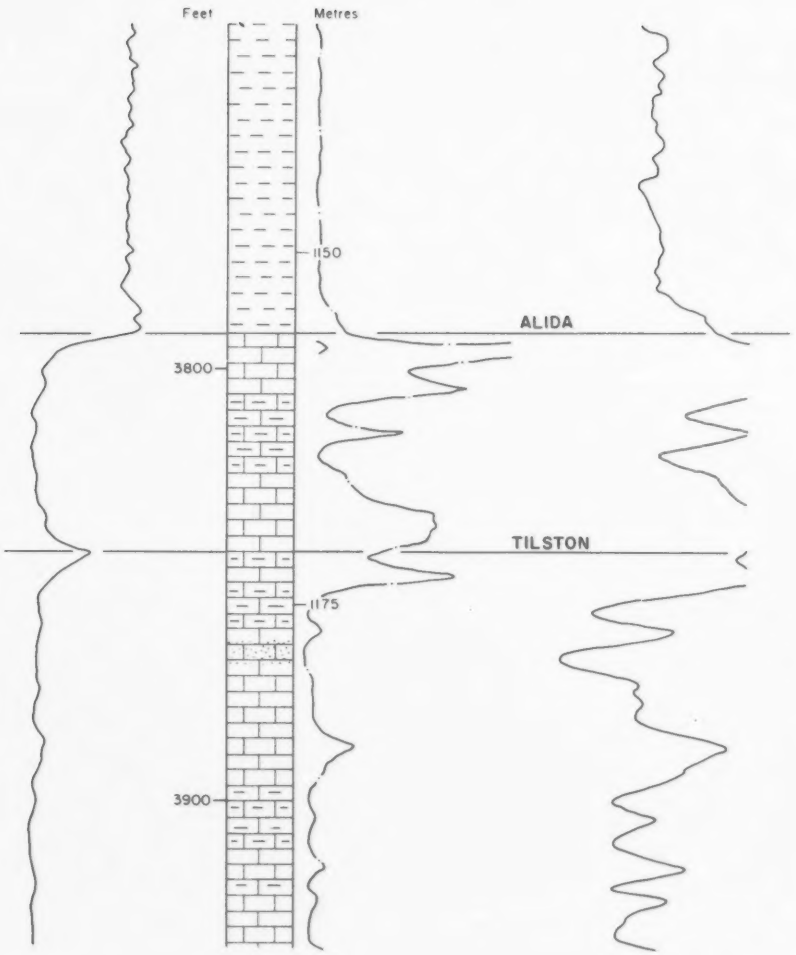
PRODUCING HORIZON : FROBISHER BEDS



SUN QUEENSDALE 2-13-6-1

2-13-6-1-W2

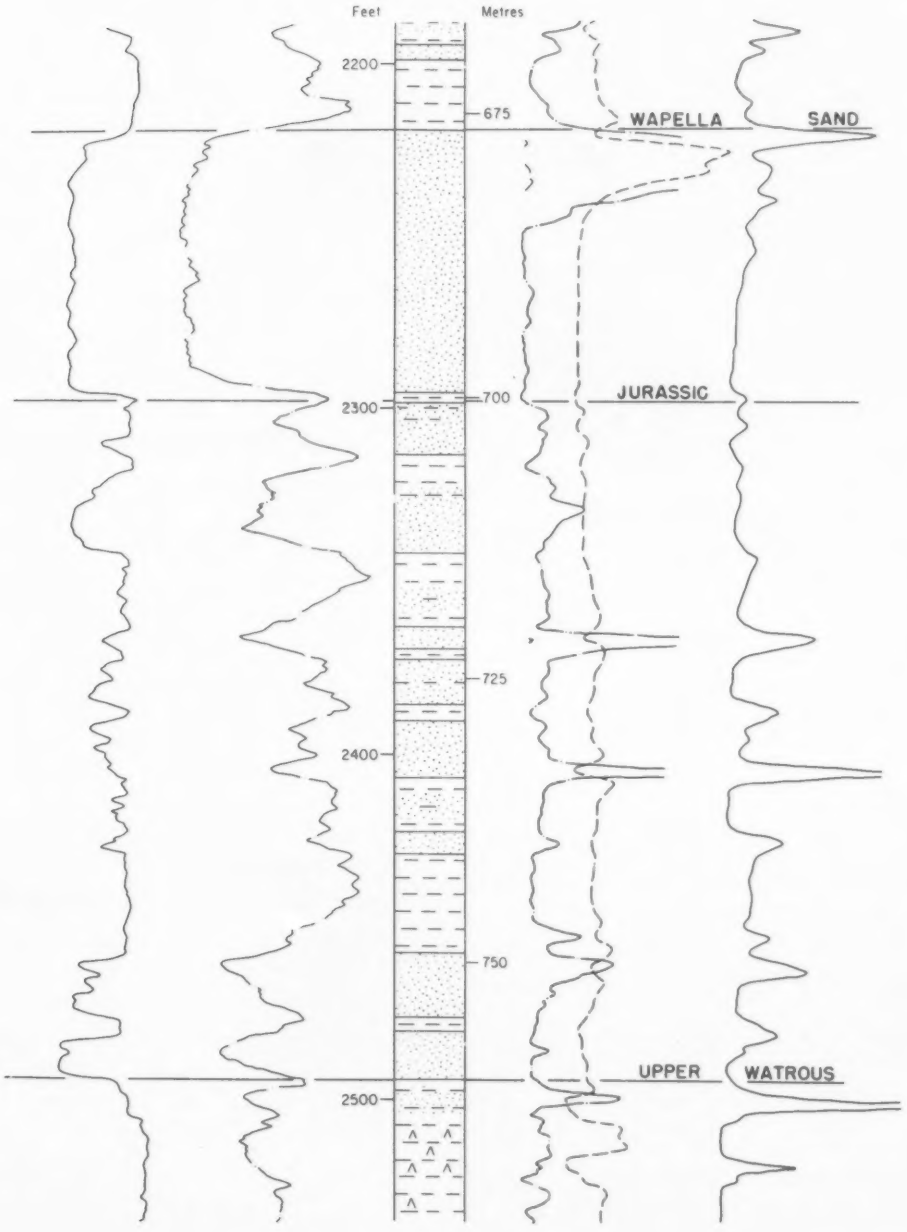
PRODUCING HORIZON : ALIDA BEDS



TIDEWATER WAPELLA 6-33

6-33-14-1-W2

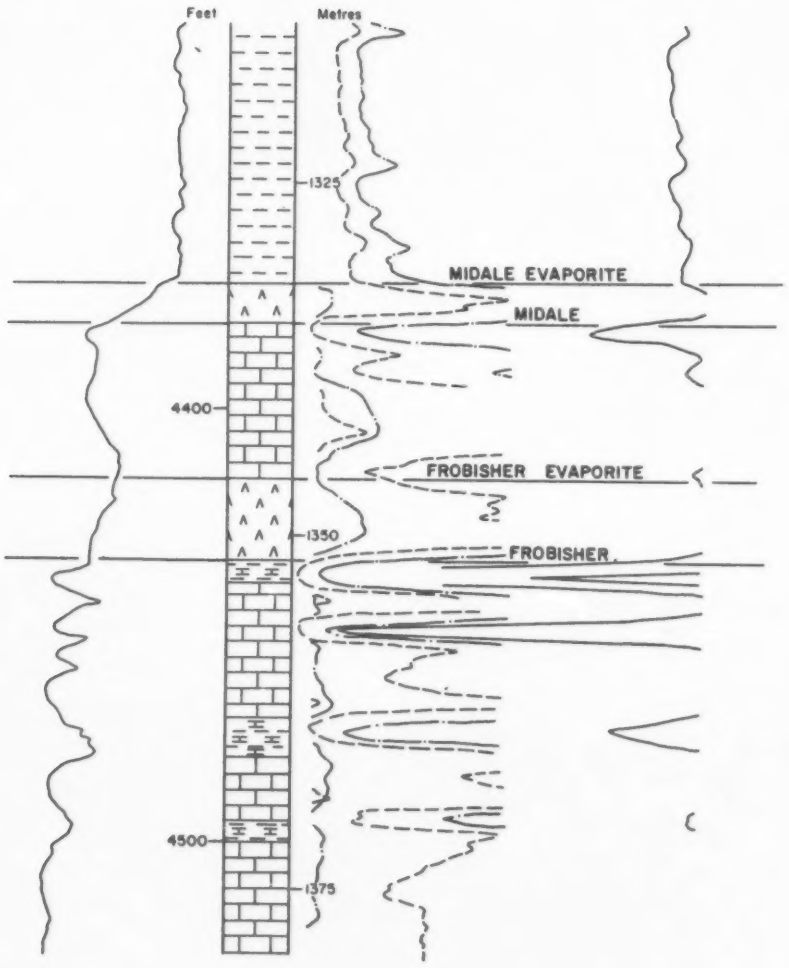
PRODUCING HORIZONS : WAPELLA AND JURASSIC SANDS



PHOENIX et al STEELMAN 5-24-5-6

5-24-5-6-W2

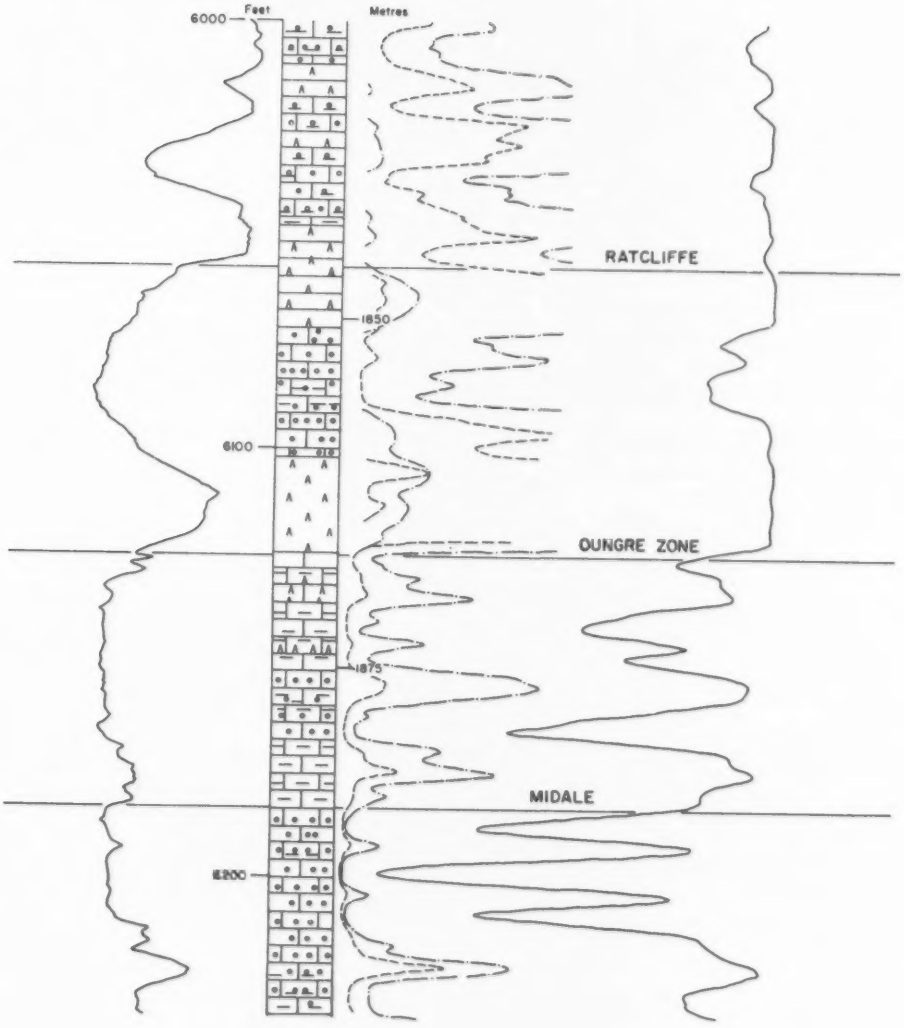
PRODUCING HORIZONS : MIDALE AND FROBISHER BEDS



CNEL CDR OUNGRE 9-24-2-15

9-24-2-15-W2

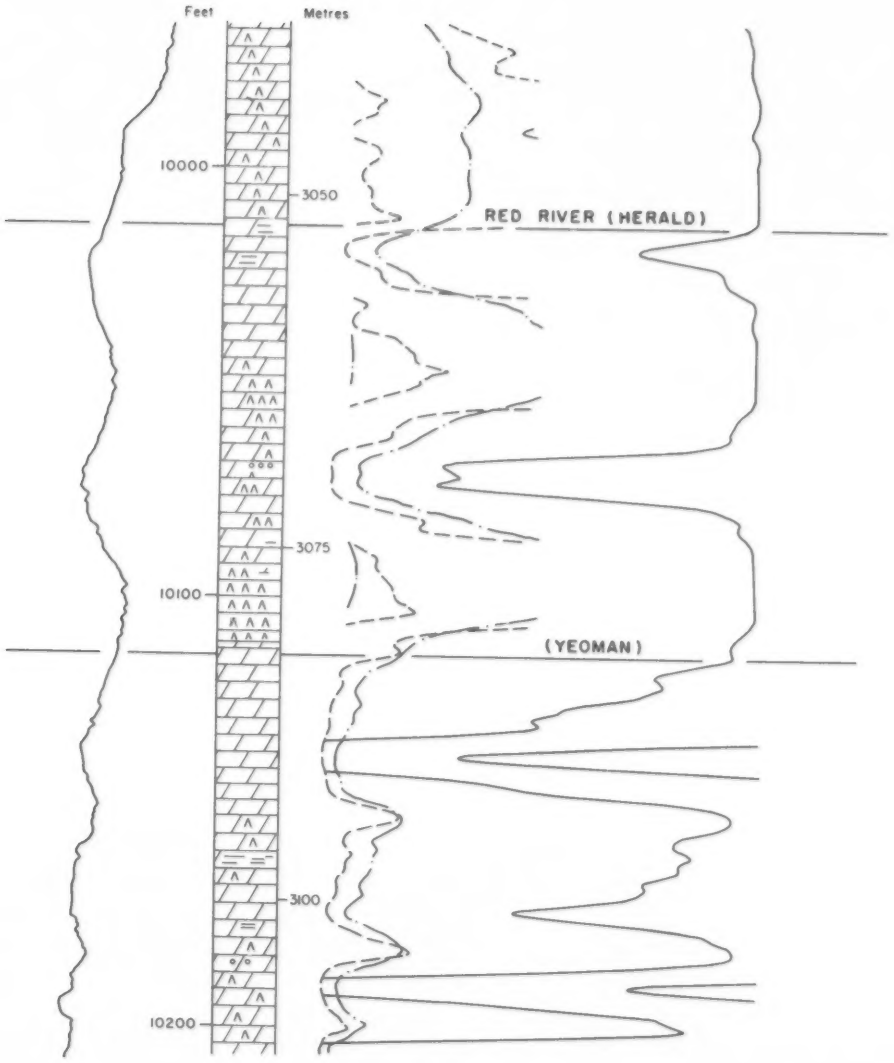
PRODUCING HORIZON : RATCLIFFE BEDS



C.D.R. S LAKE ALMA 1-14-1-17

1-14-1-17-W2

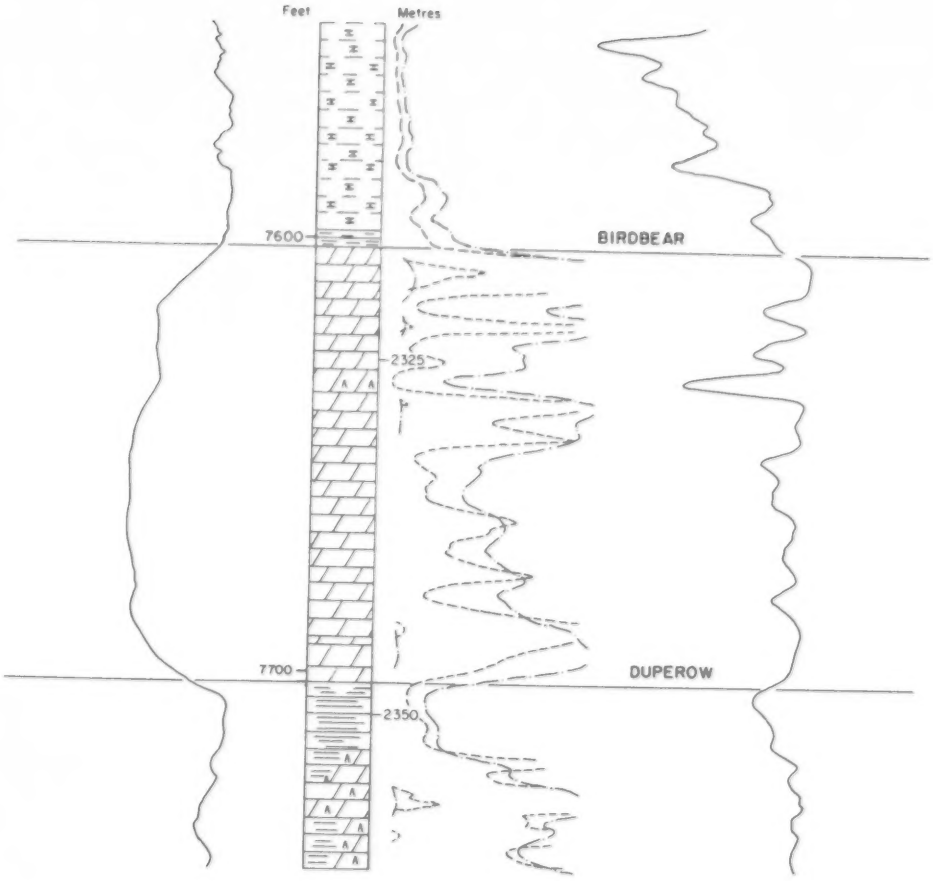
PRODUCING HORIZON : RED RIVER FORMATION



HB MIAMI HUMMINGBIRD 11-26-2-19

11-26-2-19-W2

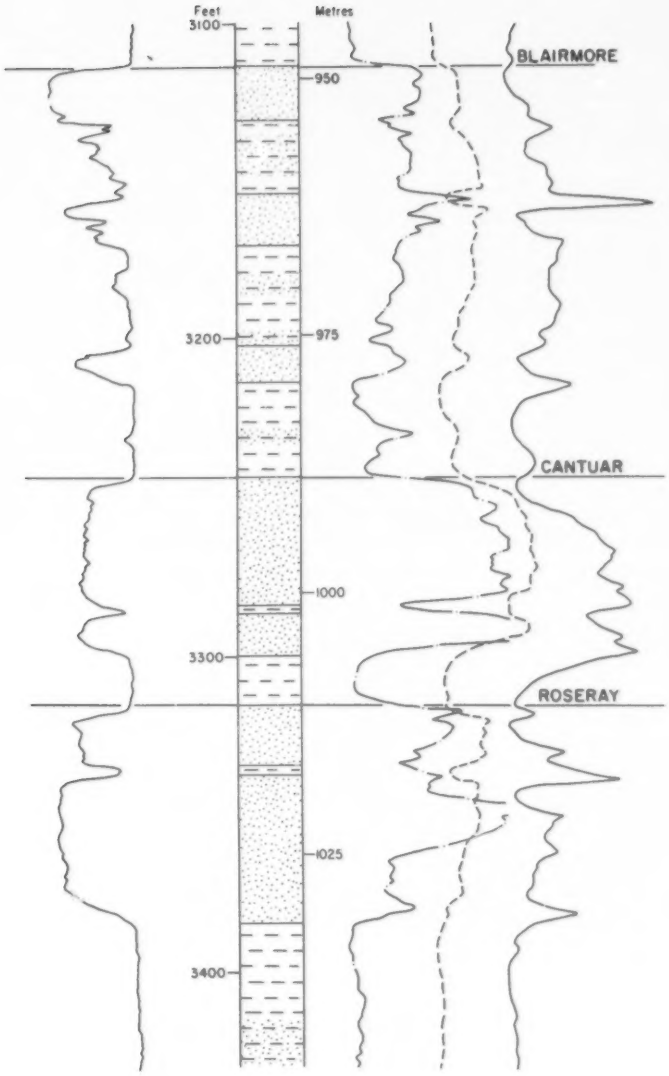
PRODUCING HORIZON : BIRDBEAR FORMATION



SASKOIL M.U.S. CANTUAR 5-2-16-17

5-2-16-17-W3

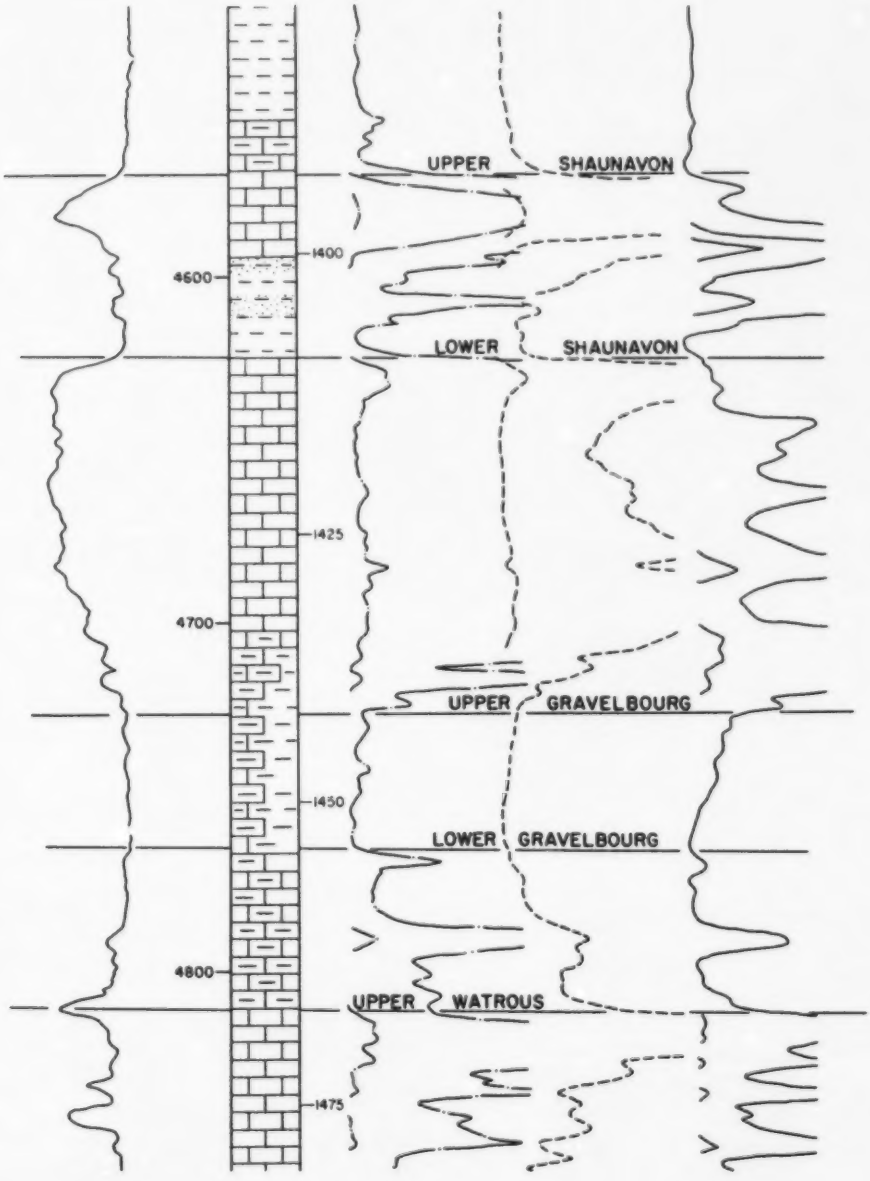
PRODUCING HORIZONS : CANTUAR AND ROSERAY SANDS



TIDEWATER INSTOW CROWN 11-33

11-33-9-18-W3

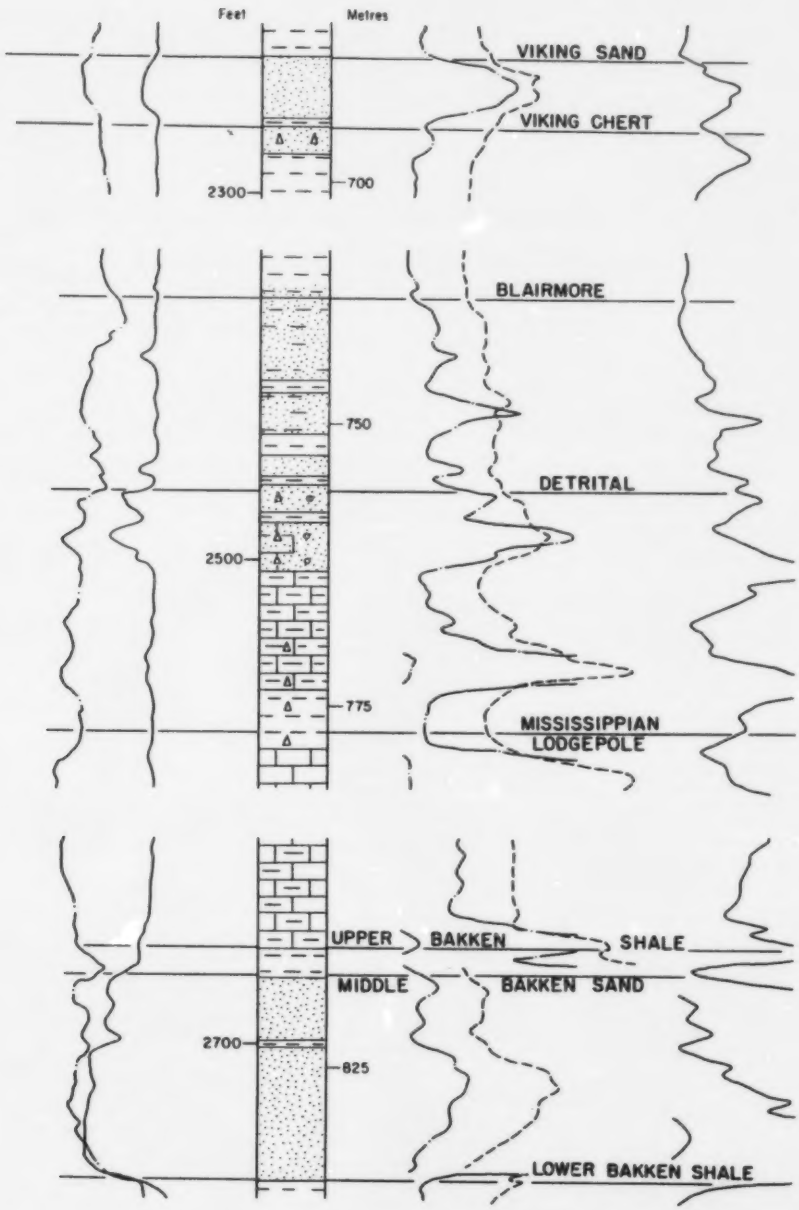
PRODUCING HORIZONS : UPPER AND LOWER SHAUNAVON FORMATIONS



COLEVILLE UNIT 5-30-31-23

5-30-31-23-W3

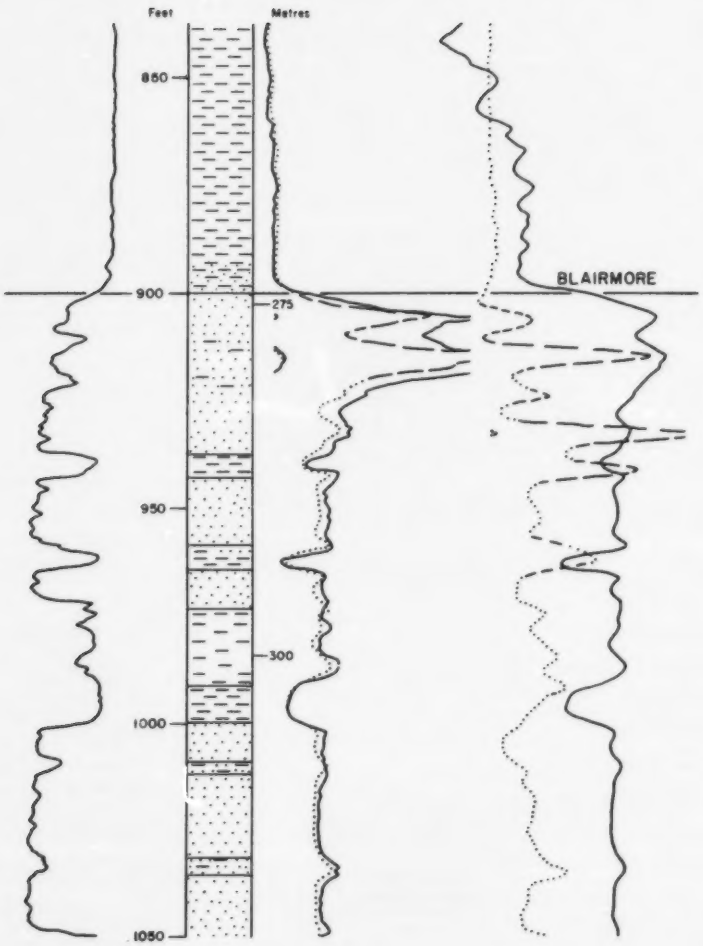
PRODUCING HORIZONS : VIKING AND MIDDLE BAKKEN SANDS



TRANSGAS BEACON HILL 10-17-61-24

10-17-61-24-W3

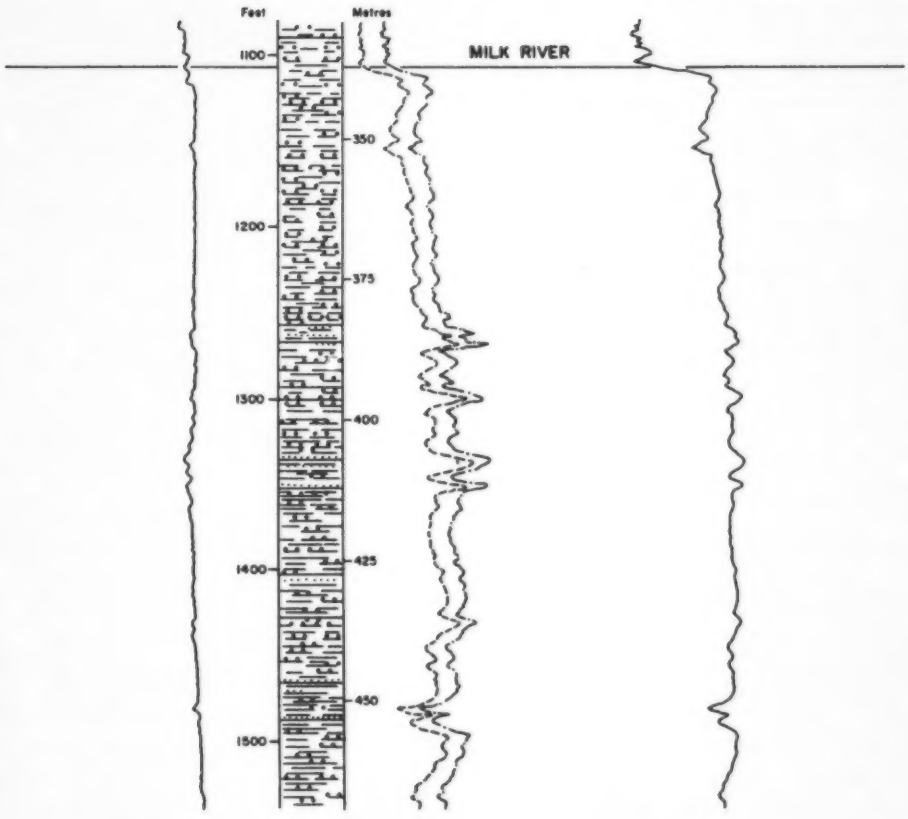
PRODUCING HORIZON : BLAIRMORE



PRECAM ET AL HATTON 11-21-17-25

11-21-17-25w3

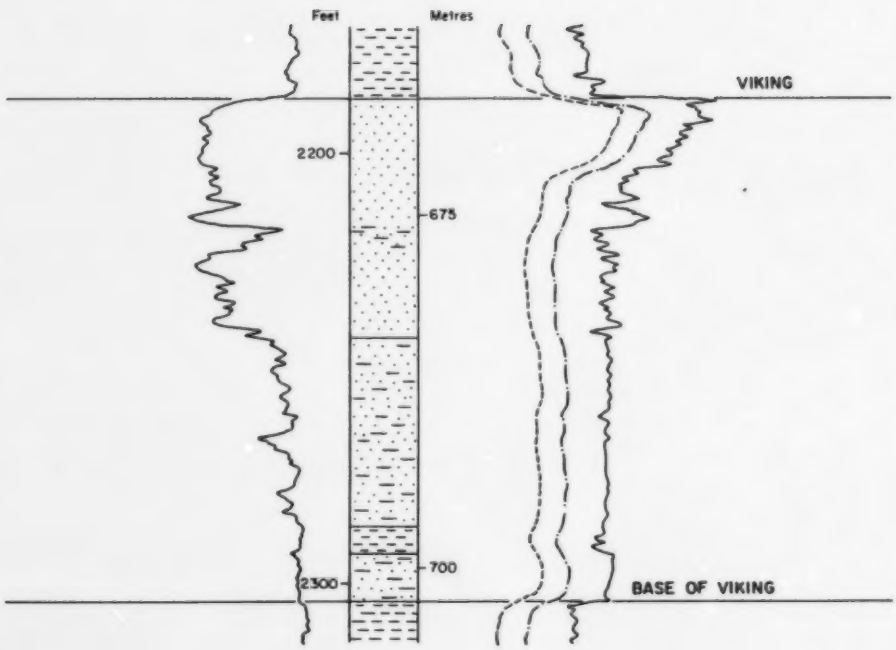
PRODUCING HORIZON : MILK RIVER SAND



IMP BAYHURST 11-19V-24-25

11-19-24-25-W3

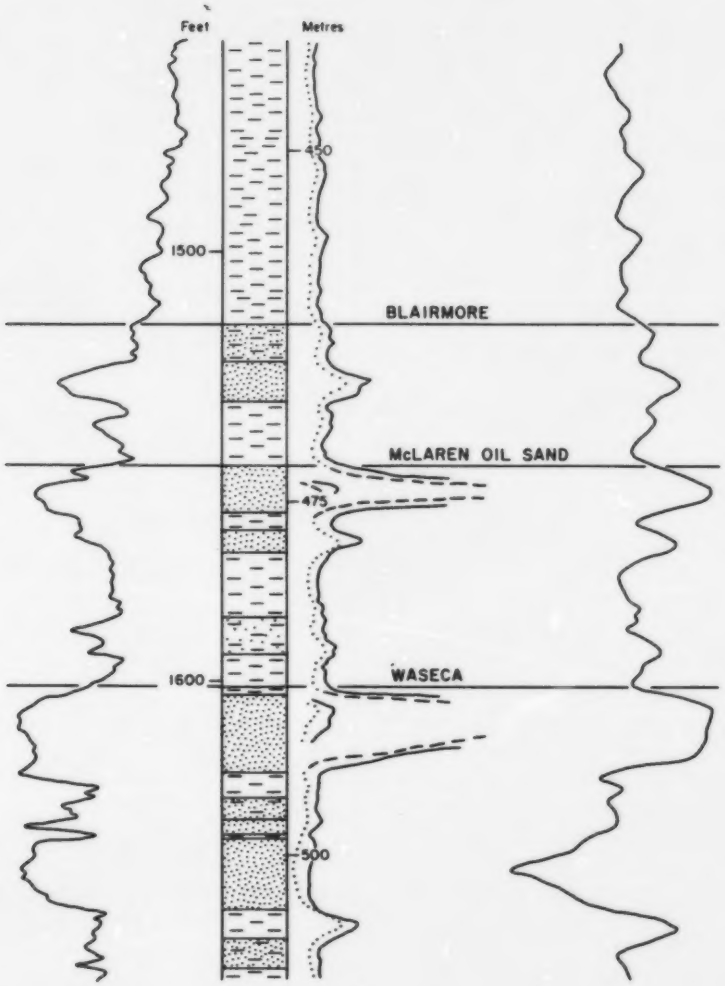
PRODUCING HORIZON : VIKING SAND



HUSKY BIG GULLY C6-27-49-25

C6-27-49-25-W3

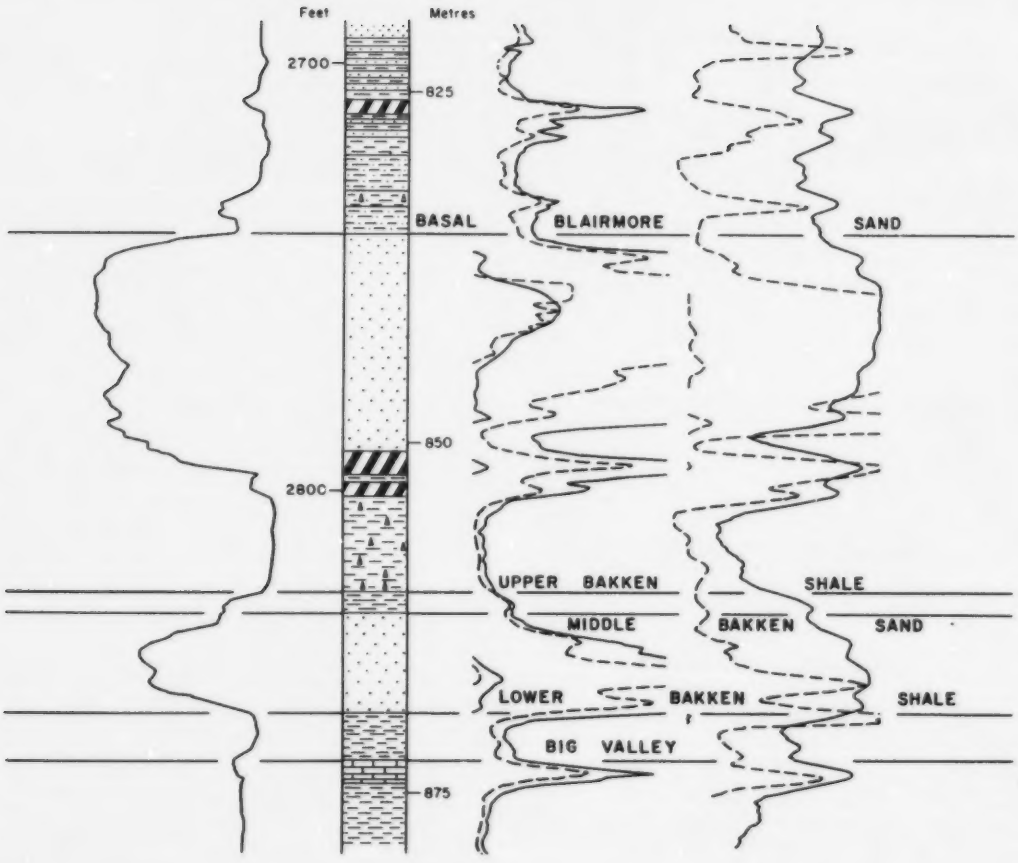
PRODUCING HORIZONS : McLAREN AND WASECA SANDS



HUSKY N. HOOSIER 6-14-32-27

6-14-32-27-W3

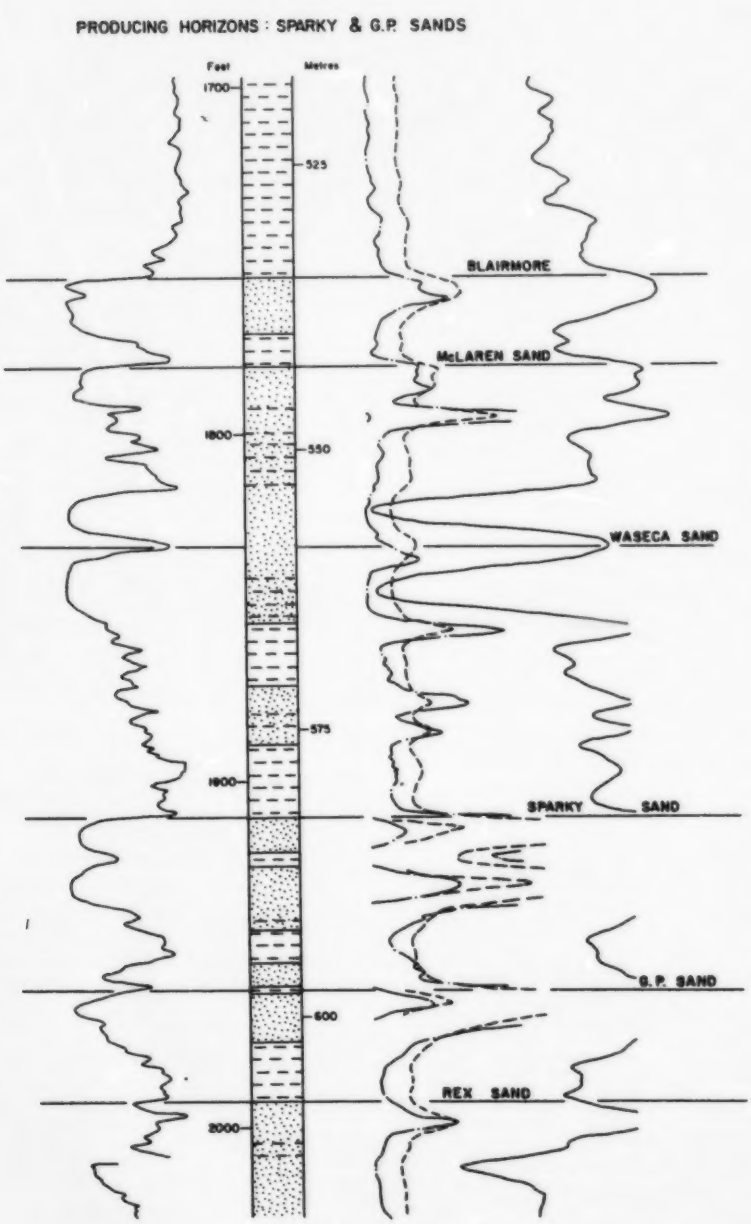
PRODUCING HORIZON : BASAL BLAIRMORE



ESSO EPPING A14-30-47-27

14-30-47-27-W3

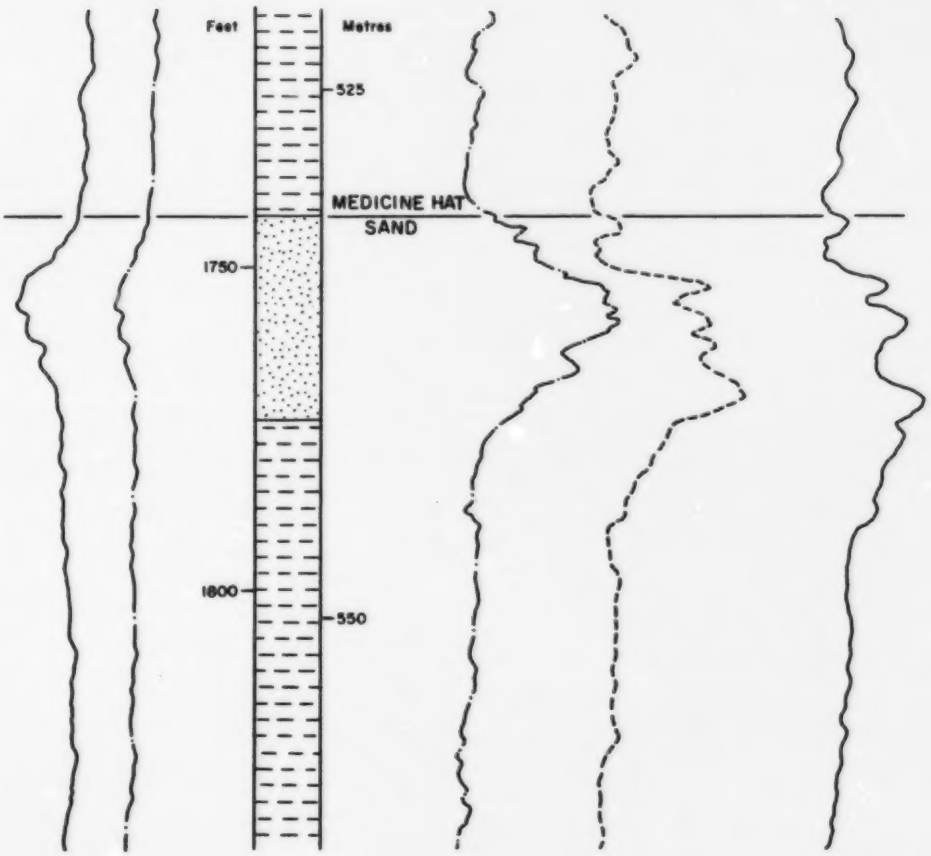
PRODUCING HORIZONS : SPARKY & G.P. SANDS



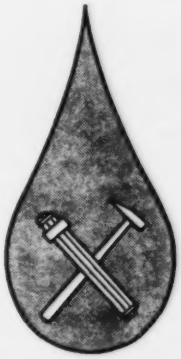
N C O HORSHAM 10-7-16-29

10-7-16-29-W3

PRODUCING HORIZON : MEDICINE HAT SAND



POOL PRESSURE DATA



INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Aberfeldy G.P. Sand	+67.2				
Aberfeldy Sparky Sand	+80.8				
Alameda Midale Beds:					
(Central Group)	792.5	7.24	57	15.39	10.64 MPa @ 57°C
(East Group)	746.8	7.24	57	15.27	10.80 MPa @ 57°C
Alameda West Frobisher Beds	786.6				
Alameda West Midale Beds	765.5				
Alida East Frobisher-Alida Beds	536.4	7.67	44	10.47	10.47 MPa @ 43°C
Alida North Alida Beds	564.8				
Alida West Frobisher-Alida Beds	545.6	7.67	45	10.54	10.54 MPa @ 45°C
Alsask Basal Blairmore Sand	91.4	9.27	33		
Antelope Lake East Roseray Sand	235.6				
Antelope Lake Upper Shaunavon	300.2	8.82	49	10.00	
Arcola Frobisher-Alida Beds	570.0	8.37	53	11.00	8.77 MPa @ 53°C
Auburnton Frobisher-Alida Beds	607.7				
Avon Hill Viking	13.7	8.37	23	6.72	
Baldwinton Sparky Sand	+43.7				
Battle Creek Madison	437.7				
Battle Creek South Upper Shaunavon	385.9				
Battle Creek Upper Shaunavon	375.7				
Battrum East Roseray Sand	193.4				
Battrum North Roseray Sand	172.4				
Battrum Roseray Sand	179.8	8.82	46	8.56	1.39 MPa @ 43°C
Bench Upper Shaunavon	438.9	8.82		12.45	
Benson East Midale Beds	721.2				
Benson Frobisher Beds	741.8				
Benson Midale Beds	754.4	7.92	68	14.38	
Beverley Cantuar Sand	243.8	9.05	48	9.11	9.11 MPa @ 48°C
Beverley East Cantuar Sand	232.3				
Beverley North Cantuar Sand	232.9				
Beverley Upper Roseray Sand	246.9	8.78			
Bienfait Midale Beds	1005.7				
Big Gully McLaren Sand	+141.7				
Big Gully North Lloydminster Sand	+60.4				
Big Gully Waseca Sand	+125.0				
Bone Creek Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Bromhead Midale Beds	1098.0	8.60		17.65	
Browning Frobisher-Alida Beds	682.8	7.24	59	12.55	
Bryant Frobisher Beds	836.2				
Bryant Midale Beds	807.4				
Buffalo Coulee Bakken Sand	108.2	9.66	26		2.21 MPa @ 26°C
Buffalo Coulee North Bakken Sand	93.0				
Butte Upper Shaunavon	417.6	8.82	49	12.37	1.23 MPa @ 49°C
Butte West Upper Shaunavon	387.2				
Buzzard Lloydminster Sand	+38.4				
Cactus Lake Basal Mannville Bakken Sand	97.1				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Cantal Frobisher-Alida Beds	579.1	6.79	47	10.87	10.85 MPa @ 47°C
Cantal South Frobisher-Alida Beds	579.1				
Cantuar East Cantuar Sand	228.6	8.60	51		
Cantuar East Roseray Sand	228.6	8.60	51		
Cantuar Lower Roseray Sand	228.6	8.78	51	9.10	9.10 MPa @ 52°C
Cantuar Main Cantuar Sand	227.1	8.78	51	8.95	8.95 MPa @ 52°C
Cantuar North Roseray Sand	238.8				
Carnduff Frobisher Beds	752.9	7.24	59	12.98	
Carnduff Midale Beds	723.9	7.24	58	15.17	
Celtic G.P. Sand	+108.5				
Celtic Sparky Sand	+118.9				
Celtic Waseca Sand	+140.2				
Chambery Upper Shaunavon	488.7				
Clarilaw Frobisher-Alida Beds	623.3	7.24	58	11.78	
Clarilaw West Frobisher-Alida Beds	619.7				
Clintonville Shaunavon	456.8				
Coleville Bakken Sand	109.7	9.50			
Coleville Mannville Sand	54.9				
Coleville South Bakken Sand	127.4				
Coleville South Mannville Sand	68.1				
Colgate Midale Beds	902.4				
Cosine Lake Lloydminster Sand	100.6				
Court Bakken Sand	129.8				
Covington Upper Shaunavon	416.1	8.82	52	11.94	3.52 MPa @ 51°C
Covington West Upper Shaunavon	417.6	8.82			
Crystal Hill Souris Valley Beds	434.3	8.37		9.19	
Dalesboro Frobisher-Alida Beds	670.6	8.37	56	12.00	
Dee Valley East Sparky Sand	+79.2				
Dee Valley East Waseca Sand	+102.1				
Dee Valley Waseca Sand	103.6				
Delta Upper Shaunavon	306.3	8.82	46	10.57	7.46 MPa @ 47°C
Dodsland Viking Sand	+4.6	7.99	23	6.41	6.41 MPa @ 23°C
Dollard Lower Shaunavon	459.6				
Dollard Upper Shaunavon	434.3	8.60	59	11.80	6.32 MPa @ 60°C
Druid Mannville Sands	59.0				
Dulwich North Sparky Sand	+86.9				
Dulwich Sparky Sand	+79.2				
Ear Lake Waseca Sand	+12.3				
Eastbrook Upper Shaunavon	461.8	9.05	54	15.70	
Eastend Shaunavon	470.3				
Edam North Waseca Sand	+121.3				
Edam Waseca Sand	+119.2				
Edam West Sparky/G.P. Sand	+92.7				
Edam West Waseca Sand	+115.6				
Edenvale Tilston Beds	533.4	7.69	43		
Elmore Frobisher Beds	701.0	7.92	52	12.05	6.83 MPa @ 51°C

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Elmore Midale Beds	685.8	7.69	52	14.33	
Elswick Midale Beds	948.8				
Epping G.P. Sand	+57.9				
Epping South Sparky Sand	+59.7				
Epping Sparky Sand	+67.1				
Eureka Viking	18.3	7.99	23	6.12	4.43 MPa @ 26°C
Evesham North McLaren Sand	+2.0				
Evesham North Sparky Sand	32.4				
Evesham Sparky Sand	33.2				
Eyehill Cummings Sand	89.9				
Fertile Tilston Beds	437.0				
Fertile Tilston-Souris Valley Beds	434.4				
Flat Lake Ratcliffe Beds	1271.0	8.37	73	20.15	9.80 MPa @ 81°C
Florence Frobisher Beds	789.4	8.37	57	13.28	
Forest Bank Mannville Sands	+115.8				
Forest Bank Sparky Sand	+99.1				
Forest Bank Waseca Sand	+120.4				
Forgan Viking Sand	9.2				
Fosterton Roseray Sand:					
Middle (II) Roseray Sand	221.0	8.82	52	9.10	
Lower (I) Roseray Sand	221.0	8.82	52	9.10	
Northwest Group	218.5	8.82	52		
Fosterton South Cantuar Sand	225.3				
Fosterton South Roseray Sand	229.6				
Freda Lake Ratcliffe Beds	960.1	8.37		18.56	
Freemont Sparky Sand	+43.8				
Freemont Waseca Sand	+62.5				
Freestone Frobisher-Alida Beds	570.0	7.92	54	11.29	
Frys East Tilston-Souris Valley Beds	395.4				
Frys Tilston-Souris Valley Beds	402.3	8.37			
Furness Sparky Sand	+73.2				
Fusilier Bakken Sand	121.9	9.27			
Gainsborough Frobisher-Alida Beds	579.1	7.24	44		
Gainsborough North Frobisher-Alida Beds	572.2				
Glen Ewen Frobisher Beds	751.3	7.24	56		
Glen Ewen Midale Beds	728.5	7.24	56	15.17	
Golden Lake North Sparky Sand	+96.0				
Golden Lake North Waseca Sand	+121.9				
Golden Lake South Sparky Sand	+96.0				
Golden Lake South Waseca Sand	+115.8				
Griffin Frobisher Beds	690.4	8.60	62		
Gull Lake Basal Cantuar Sand	300.2	8.82	47		8.79 MPa @ 47°C
Gull Lake Central Upper Shaunavon	387.1	8.82	51		
Gull Lake North Upper Shaunavon	365.8	8.82	48	11.11	1.10 MPa @ 46°C
Gull Lake South Upper Shaunavon	402.3	8.82	52	11.71	
Gully Lake Waseca Sand	+103.6				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Handsworth Alida Beds	536.4	8.60	51	10.99	
Hartaven Frobisher-Alida Beds	577.6	8.60	56	11.58	
Hastings East Frobisher Beds	598.7				
Hastings Frobisher Beds	643.1	6.79	49	11.65	11.65 MPa @ 50°C
Hastings West Frobisher Beds	668.5				
Hazelwood South Tilston Beds	437.0				
Hazelwood Tilston Beds	425.2	8.37	43	9.53	
Hazelwood West Tilston Beds	428.7				
Hazlet Roseray Sand	205.7	9.05	47	9.13	5.60 MPa @ 47°C
Hearts Hill Bakken Sand	64.9				
Hillmond G.P. Sand	+102.0				
Hillmond Sparky Sand	+108.8				
Hoffer Ratcliffe Beds (Lower)	1248.2	8.60		19.47	
Hoffer Ratcliffe Beds (Upper)	1231.4	8.60		19.33	
Hoosier Bakken Sand	150.9	9.50			
Hume Frobisher Beds	739.1	8.60	64	13.21	
Hume Midale Beds	723.9	8.60		14.23	
Hummingbird Bakken Sand	1488.0				
Hummingbird Birdbear	1585.0	8.14	82	23.16	8.09 MPa @ 82°C
Hummingbird Ratcliffe Beds	1155.2	8.60	71	18.70	6.03 MPa @ 71°C
Huntoon Frobisher Beds	754.4	8.60	61		
Huntoon Midale Beds	737.6	8.60	55		
Illerbrun Upper Shaunavon	414.5	8.82	49	11.86	3.15 MPa @ 49°C
Ingoldsby Frobisher-Alida Beds	548.6	7.89	46	10.51	4.81 MPa @ 45°C
Ingoldsby West Frobisher-Alida Beds	659.6				
Innes Frobisher Beds	719.3	8.60	63	12.98	7.78 MPa @ 61°C
Instow Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Java Cantuar Sand	242.3				
Johnston Upper Shaunavon	371.9	8.82	48	9.24	
Kenosee Tilston Beds	426.7	7.92	46	9.38	
Kerrobert Viking Sand	3.0				
Kisbey Birdbear	1018.3				
Kisbey Frobisher-Alida Beds	587.8				
Lake Alma Ratcliffe Beds	1268.0	8.37	67	20.27	
Landrose McLaren Sand	+144.8				
Landrose Waseca Sand	+129.5				
Lashburn South Sparky Sand	+93.7				
Lashburn South Waseca Sand	+117.3				
Lashburn Waseca Sand	+126.5				
Lashburn West Sparky Sand	+81.4				
Leitchville Shaunavon	452.6	8.60	50	12.51	4.78 MPa @ 49°C
Leon Lake Shaunavon	457.2	8.60	52	10.69	5.52 MPa @ 41°C
Lightning Tilston Beds	449.6	7.92	46	9.39	
Lloydminster Sparky Sand	+83.8				
Lone Rock Sparky Sand	+71.6				
Lost Horse Hill Frobisher-Alida Beds	559.3	8.14	57	11.40	3.36 MPa @ 55°C

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Lougheed Midale Beds	807.7	8.14	61		
Loverna Detrital	126.5	8.60			
Low Lake Waseca Sand	+111.3				
Lucky Hills Viking	7.6	8.37			
Luseland Bakken Sand	44.9				
Macklin Sparky Sand	39.6				
Macoun Midale Beds	946.4	8.82	63		9.32 MPa @ 63°C
Macoun West Midale Beds	978.3				
Maidstone McLaren Sand	+126.1				
Maidstone Waseca Sand	+113.4				
Main Success Roseray Sand	225.6	8.60	50	9.06	8.67 MPa @ 59°C
Manito Lake Sparky Sand	+27.7				
Marsden South Sparky Sand	+31.7				
Marsden Sparky Sand	+36.1				
Melrose Frobisher-Alida Beds	551.7	8.14	54		
Midale Central Frobisher Beds	786.4	7.69	63	14.31	5.24 MPa @ 57°C
Midale Central Midale Beds	800.1	7.92	63	14.31	6.09 MPa @ 63°C
Minard Midale Beds	738.5				
Moose Mountain Tilston Beds	435.9	8.48	46	9.45	3.14 MPa @ 41°C
Moose Valley South Tilston Beds	435.2				
Moose Valley Tilston Beds	428.2	8.60			
Morrisview Frobisher-Alida Beds	661.4	8.37	48	12.37	
Neilburg McLaren Sand	+103.9				
Neptune Ratcliffe Beds	1034.8	8.37			
North Antler Midale Beds	658.4	8.14	56	13.98	
Northgate Frobisher Beds	1033.3	8.14	63		
Northgate Midale Beds	1021.1	7.24	71	18.03	14.48 MPa @ 70°C
North Handsworth Alida Beds	538.0	8.60	55	11.08	
North Hoosier Bakken Sand	135.3	9.50	31	7.74	7.79 MPa @ 31°C
North Hoosier Basal Blairmore Sand	120.4	9.34	29	5.85	
Northminster North G.P. Sand	+83.2				
Northminster North Sparky Sand	+94.1				
Northminster Sparky Sand	+91.4				
North Premier Roseray Sand	228.6	8.60	47	9.25	3.12 MPa @ 47°C
North Premier Upper Shaunavon	310.9	8.82	57	10.31	0.89 MPa @ 49°C
North Smiley Bakken Sand	97.0				
Nottingham Alida Beds	548.6	7.15	43	10.60	10.66 MPa @ 44°C
Notukeu Upper Shaunavon	461.2				
Oakley Frobisher Beds	582.2	6.72	46	10.95	10.95 MPa @ 47°C
Oungre Ratcliffe Beds	1188.7	8.14	70	18.96	8.07 MPa @ 74°C
Parkman Souris Valley Beds	416.1	8.37	49	9.09	
Parkman South Tilston-Souris Valley Beds	455.7	8.23	38	9.45	
Parkman Tilston Beds	442.0	7.92	43	9.51	2.79 MPa @ 43°C
Parkman Tilston-Souris Valley Beds	402.3	7.92	38	9.10	2.41 MPa @ 38°C
Pennant Upper Shaunavon	265.2	9.05			
Pikes Peak G.P. Sand	+81.0				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Pikes Peak Sparky Sand	+91.4				
Pikes Peak Waseca Sand	+123.4				
Pinto Frobisher Beds	1036.3	7.01	66	16.55	
Pinto Midale Beds	1024.1	7.01	70	17.24	13.85 MPa @ 70°C
Plato North Viking Sand	20.8				
Plato Viking Sand	9.1	8.37	24	6.89	3.28 MPa @ 21°C
Plenty Viking Sand	+2.7				
Plover Lake Bakken Sand	86.6				
Plover Lake McLaren Sand	32.6				
Prairiedale Viking Sand	22.1				
Queensdale East Frobisher-Alida Beds	573.0	5.78	47	10.84	7.72 MPa @ 46°C
Queensdale North Alida Beds	588.3	7.58	49	10.85	
Queensdale West Alida Beds	600.5	7.58	48	11.25	11.24 MPa @ 48°C
Ralph Midale Beds	723.9	7.92			
Ralph West Midale Beds	730.7				
Rapdan Upper Shaunavon	449.6	8.60	49	13.72	5.61 MPa @ 56°C
Rapdan West Upper Shaunavon	471.0				
Red Jacket Gravelbourg	153.7				
Red Jacket Shaunavon-Gravelbourg	82.7				
Rocanville Bakken Sand	160.0	8.37	27	6.23	
Roncott Bakken Sand	1121.7	8.08	59		2.05 MPa @ 52°C
Rosebank Alida Beds	536.4	7.19	44	10.49	
Rosebank South Alida Beds	533.4	7.46	43		
Rush Lake Sparky Sand	+88.3				
Rush Lake Waseca Sand	+113.9				
Salt Lake Lloydminster Sand	56.2				
Senlac Lloydminster Sand	78.2				
Sherwood Frobisher Beds	701.0	7.92	56	12.27	8.76 MPa @ 56°C
Silverdale Sparky Sand	+68.6				
Silverton Frobisher Beds	618.7	8.37	49		
Skinner Lake Ratcliffe Beds	1008.9	8.37			
Smiley Dewar Viking	15.2	7.99	23	6.47	6.36 MPa @ 22°C
Smiley Dewar Viking Chert	18.3	7.99	23	6.49	
Souris Flat Frobisher Beds	789.4	8.28	59	13.34	11.82MPa @ 59°C
South Fletwode Tilston Beds	429.8	7.92	44	9.45	
South Success Roseray Sand	231.0	8.60	51	8.96	8.96 MPa @ 53°C
Standard Hill Waseca Sand	+109.7				
Star Valley Frobisher-Alida Beds	536.4	7.46	52	10.82	8.61 MPa @ 52°C
Steelman Frobisher Beds	853.4	7.01	67	14.36	
Steelman Midale Beds	853.4	7.01	67	14.34	14.34 MPa @ 63°C
Storthoaks Alida-Tilston Beds	493.8	7.92	38	9.80	8.09 MPa @ 42°C
Stoughton Frobisher-Alida Beds	644.7	7.46	61	12.07	8.09 MPa @ 62°C
Stoughton South Frobisher Beds	647.7	7.46		14.13	
Success North Roseray Sand	236.9				
Success Roseray Sand Alpha	219.5	8.60	51	8.76	7.86 MPa @ 51°C
Suffield Roseray Sand	259.1	8.60	52	12.98	7.41 MPa @ 44°C

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Suffield Upper Shaunavon	318.5	8.82	50	10.82	
Tableland Winnipegosis	2029.9				
Tangleflags East McLaren Sand	+139.6				
Tangleflags G.P. Sand	+100.6				
Tangleflags Lloydminster Sand	+61.0				
Tangleflags McLaren Sand	+141.4				
Tangleflags North G.P. Sand	+99.1				
Tangleflags North Lloyd/Cummings Sand	+57.7				
Tangleflags Sparky Sand	+109.7				
Tangleflags West G.P. Sand	+102.9				
Tangleflags West Lloydminster Sand	+62.4				
Tangleflags West McLaren Sand	+146.8				
Tangleflags West Sparky Sand	+113.5				
Tatagwa Midale Beds	857.4				
Tatagwa North Midale Beds	817.4				
Verendrye Viking Sand	22.0				
Verlo Roseray Sand	213.4	8.82	52	9.14	9.24 MPa @ 39°C
Viewfield Frobisher Beds	670.6	8.69	65	12.22	9.03 MPa @ 65°C
View Hill Midale Beds	957.1	8.75	76	15.69	
Wapella Sand	76.2	8.37	32	5.25	0.34 MPa @ 29°C
Warmley Alida Beds	496.2	8.37	54	10.15	
Wauchope Alida-Tilston Beds	524.1				
Wauchope North Tilston Beds	458.3				
Weir Hill Frobisher Beds	762.0	7.24			
Westhazel G.P. Sand	+90.1				
Westhazel Sparky Sand	+103.8				
West Innes Frobisher Beds	722.4	8.60	64	13.07	
West Kingsford Midale Beds	876.3	7.01	67	14.82	9.40 MPa @ 67°C
Weyburn Frobisher Beds	807.7	8.14	61		
Weyburn Midale Beds	807.7	8.14	61	14.60	
White Bear Tilston Beds	445.0	7.92	43	9.74	
White Bear Tilston-Souris Valley Beds	457.2	8.37	39	9.47	2.41 MPa @ 39°C
Whitemud Shaunavon	469.4	9.05	54	13.79	5.52 MPa @ 41°C
Whiteside Viking Sand	36.6	7.92	24	6.38	
Wildwood Alida Beds	582.2	8.37	48	10.77	
Willmar Frobisher Alida Beds	661.4	7.24	54	11.87	11.32 MPa @ 53°C
Winmore Frobisher Beds	641.6	8.60		11.23	
Winter Cummings Sand	36.9				
Wordsworth Frobisher-Alida Beds	650.0				
Workman Frobisher Beds	701.0	7.69	54	12.27	6.55 MPa @ 59°C
Workman Midale Beds	685.8	7.24	54	14.75	7.64 MPa @ 53°C

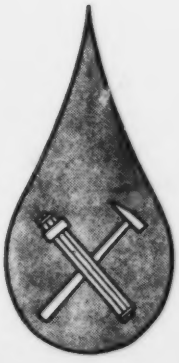
INITIAL GAS POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	TEMPERATURE AT DATUM DEPTH °C	PSEUDO-REDUCED TEMPERATURE	PSEUDO-REDUCED PRESSURE	VIRGIN PRESSURE AT DATUM DEPTH kPa
Bayhurst Viking Gas Pool	+9.1	25	1.61	1.47	6 700
Bayhurst West Viking Gas Pool	-7.6	28	1.60	1.47	6 720
Beacon Hill Mannville Sand Gas Pool	+256.0	21	1.56	0.47	2 170
Beacon Hill South Mannville Sand Gas Pool	+261.7	21	1.56	0.47	2 170
Beacon Hill West Mannville Sand Gas Pool	+241.7	21	1.56	0.46	2 351
Beverley East Cantuar Gas Pool	+170.0	46	1.67	2.11	9 650
Bigstick Second White Specks Gas Pool	+101.2	26	1.59	0.46	6 105
Brock East Viking Gas Pool	-7.6	29	1.62	1.55	7 060
Brock Viking Sand Gas Pool	-3.0	28	1.59	1.46	6 690
Bronson Lake Colony Sand Gas Pool	+197.7	16	1.54	0.59	2 706
Bronson Lake Waseca Sand Gas Pool	+183.6	17	1.54	0.62	2 846
Burstall Medicine Hat Sand Gas Pool	+231.5	17	1.53	0.94	4 309
Burstall Milk River Gas Pool	+278.8	16	1.53	0.75	3 447
Burstall North Viking Sand Gas	-11.0	27	1.71	1.59	7 782
Cavalier Spinney Hill Sand Gas Pool	+162.1	18	1.60	0.70	3 140
Coleville-Smiley Viking Sand Gas Pool	+12.2	24	1.50	1.40	6 480
Consul Second White Specks Gas Pool	+115.3	29	1.63	1.46	6 681
Consul Upper Shaunavon Gas Pool	-330.0	49	1.68	2.80	12 976
Crane Lake Milk River Gas Pool	+308.7	15	1.53	0.75	3 585
Crane Lake South Second White Specks Gas Pool	+56.1	27	1.46	1.33	6 033
Dodsland North Viking Gas Pool	+21.3	23	1.50	1.33	6 110
Driver Bakken Sand Gas Pool	-100.4	27	1.58	1.53	7 079
Driver Mannville Sand Gas Pool	-49.9	27	1.60	1.50	6 804
Flat Valley Colony Sand Gas Pool	+234.5	21	1.56	0.50	2 310
Flat Valley St. Walburg Sand Gas Pool	+330.5	21	1.53	0.47	2 138
Fort Pitt Mannville Sand Gas Pool	+191.0	20	1.79	0.61	2 790
Fort Pitt North Colony Sand Gas Pool	+198.9	19	1.77	0.62	2 850
Fort Pitt North Waseca Sand Gas Pool	+198.9	19	1.77	0.62	2 850
Freefight Milk River Gas Pool	+295.8	15	1.53	0.75	3 406
Frenchman Butte Colony Sand Gas Pool	+198.3	20	1.55	0.60	2 755
Frenchman Butte St. Walburg Sand Gas Pool	+288.5	18	1.64	0.65	2 985
Frenchman Butte Waseca Sand Gas Pool	+168.8	20	1.53	0.62	2 867
Glidden Viking Gas Pool	-1.5	22	1.57	1.47	6 690
Greenan Viking Gas Pool	-15.2	28	1.61	1.45	6 580
Gull Lake Cantuar Gas Pool	-259.1	43	1.59	2.05	9 480
Hatton Medicine Hat Sand Gas Pool	+274.3	17	1.53	0.94	4 310
Hatton Milk River Gas Pool	+321.6	16	1.53	0.75	3 450
Hoosier Viking Sand Gas Pool	-18.3	26	1.52	1.43	6 560
Ingebrigt Milk River Gas Pool	+289.0	16	1.53	0.75	3 470
Liebenthal Milk River Gas Pool	+297.2	16	1.53	0.79	3 630
Lloydminster Colony Sand Gas Pool	+134.1	23	1.54	0.70	3 260
Loverna North Mannville Sand Gas Pool	-41.8	33	1.58	1.65	7 694
Loverna South Bakken Sand Gas Pool	-136.8	30	1.57	1.74	8 074
Loverna South Viking Sand Gas Pool	-4.0	24	1.54	1.12	5 144
Loverna West Bakken Sand Gas Pool	-135.3	32	1.56	1.77	8 073

INITIAL GAS POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	TEMPERATURE AT DATUM DEPTH °C	PSEUDO-REDUCED TEMPERATURE	PSEUDO-REDUCED PRESSURE	VIRGIN PRESSURE AT DATUM DEPTH kPa
Makwa Mannville Sand Gas Pool	+249.4	15	1.52	0.50	2 325
Marengo Viking Gas Pool	-10.7	21	1.48	1.47	6 740
Milton Viking Sand Gas Pool	-18.3	23	1.49	1.42	6 550
Peck Lake Colony Sand Gas Pool	+200.1	24	1.55	0.64	2 951
Pierceland Mannville Sand Gas Pool	+256.0	21	1.56	0.46	2 100
Senate Second White Specks Gas Pool	+121.9	29	1.61	1.39	6 281
Superb Bakken Sand Gas Pool	-79.1	29	1.59	1.53	6 978
Tangleflags Colony Sand Gas Pool	+159.1	20	1.61	0.69	3 119
Tangleflags McLaren Sand Gas Pool	+149.3	21	1.55	0.71	3 247
Tangleflags Second White Specks Gas Pool	+274.0	18	1.54	0.67	3 057
Tangleflags St. Walburg Sand Gas Pool	+254.0	18	1.55	0.73	3 345
Totnes Viking Gas Pool	-3.0	24	1.59	1.50	6 830
Unity South Sparky Sand Gas Pool	-9.8	26	1.58	1.04	4 750
Unity South Unity Sand Gas Pool	-38.8	29	1.52	1.14	5 288
Unity South Viking Sand Gas Pool	+85.5	24	1.50	1.11	5 157
Wheat Valley Cantuar Sand Gas Pool	-220.0	40	1.63	1.73	8 003
Whiteside Ribstone Creek Sand Gas Pool	+481.6	20	1.53	0.43	2 000
Whiteside West Ribstone Creek Sand Gas Pool	+485.3	14	1.53	0.27	1 240
Whiteside West Viking Sand Gas Pool	-14.4	27	1.51	1.24	5 940

MPR FACTORS



MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
232501	Aberfeldy G.P. Sand Pool	30	90	1	40
232106	Aberfeldy Sparky Sand Pool	30	90	1	40
433007	Alameda Midale Beds Pool	35	75	2	80
435191	Alameda West Frobisher Beds Pool	35	75	2	80
433036	Alameda West Midale Beds Pool	35	72	2	80
435038	Alida East Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
435785	Alida North Alida Beds Pool	35	75	1	40
435044	Alida West Frobisher-Alida Beds Pool	35	77	1	40
239022	Alsask Basal Blairmore Sand Pool	25	75	1	40
314552	Antelope Lake East Roseray Sand Pool	30	93	2	80
331064	Antelope Lake Upper Shaunavon Pool	25	93	2	80
435024	Arcola Frobisher-Alida Beds Pool	35	79	1	40
435040	Auburnton Frobisher-Alida Beds Pool	35	75	1	40
227331	Avon Hill Viking Pool	35	90	1	40
232135	Baldwinton Sparky Sand Pool	30	90	1	40
430073	Battle Creek Madison Pool	25	90	2	80
331001	Battle Creek South Upper Shaunavon Pool	25	90	2	80
331072	Battle Creek Upper Shaunavon Pool	25	90	2	80
314540	Battrum East Roseray Sand Pool	41	97.5	2	80
314553	Battrum North Roseray Sand Pool	41	97.5	1	40
314546	Battrum Roseray Sand Pool (Upper)	41	97.5	1 & 2	40 & 80
	(Main)	17	97.5	1 & 2	40 & 80
331060	Bench Upper Shaunavon Pool	25	75	4	160
433076	Benson East Midale Beds Pool	50	89	2	80
435173	Benson Frobisher Beds Pool	50	89	2	80
433075	Benson Midale Beds Pool	50	89	2 & 4	80 & 160
238146	Beverley Cantuar Sand Pool	30	90	2	80
238152	Beverley East Cantuar Sand Pool	30	90	2	80
238148	Beverley North Cantuar Sand Pool	30	90	1 & 2	40 & 80
314641	Beverley Upper Roseray Sand Pool	35	90	1	40
433035	Bienfait Midale Beds Pool	35	85	2	80
231202	Big Gully McLaren Sand Pool	30	90	1	40
234120	Big Gully North Lloydminster Sand Pool	30	90	1	40
231309	Big Gully Waseca Sand Pool	30	90	1	40
331050	Bone Creek Upper Shaunavon Pool	15	94	2	80
433089	Bromhead Midale Beds Pool	35	75	4	160
435019	Browning Frobisher-Alida Beds Pool	35	75	2	80
435172	Bryant Frobisher Beds Pool	35	75	4	160
433099	Bryant Midale Beds Pool	35	89	4	160
441422	Buffalo Coulee Bakken Sand Pool	25	93	1/2	20
441428	Buffalo Coulee North Bakken Sand Pool	25	93	1	40
331059	Butte Upper Shaunavon Pool	25	96	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
331047	Butte West Upper Shaunavon Pool	25	95	2	80
234133	Buzzard Lloydminster Sand Pool	30	90	1	40
441426	Cactus Lake Basal Mannville - Bakken Sand Pool	25	95	1	40
435005	Cantal Frobisher-Alida Beds Pool	35	75	1	40
435039	Cantal South Frobisher-Alida Beds Pool	35	75	2	80
238143	Cantuar East Cantuar Sand Pool	30	90	2	80
314550	Cantuar East Roseray Sand Pool	35	90	2	80
314741	Cantuar Lower Roseray Sand Pool	35	95	1	40
238141	Cantuar Main Cantuar Sand Pool	30	90	1	40
314555	Cantuar North Roseray Sand Pool	35	95	2	80
435180	Carnduff Frobisher Beds Pool	35	75	2	80
433006	Carnduff Midale Beds Pool	35	75	2	80
232511	Celtic G.P. Sand Pool	30	90	1	40
230903	Celtic Mannville Sands Pool	30	90	1	40
232122	Celtic Sparky Sand Pool	30	90	1	40
231313	Celtic Waseca Sand Pool	30	90	1	40
331073	Chambery Upper Shaunvon Pool	20	91	4	160
435021	Clarilaw Frobisher-Alida Beds Pool	35	75	2	80
435041	Clarilaw West Frobisher-Alida Beds Pool	35	75	1	40
330062	Clintonville Shaunavon Pool	25	90	4	160
441421	Coleville Bakken Sand Pool	15	93	1/2	20
230026	Coleville Mannville Sand Pool	25	90	1	40
441429	Coleville South Bakken Sand Pool	15	93	1	40
230027	Coleville South Mannville Sand Pool	25	90	1	40
433002	Colgate Midale Beds Pool	35	92	1	40
234122	Cosine Lake Lloydminster Sand Pool	30	90	1	40
441431	Court Bakken Sand Pool	25	95	1	40
331055	Covington Upper Shaunavon Pool	15	94	2	80
331071	Covington West Upper Shaunavon Pool	25	75	4	160
438030	Crystal Hill Souris Valley Beds Pool	40	90	1 & 2	40 & 80
435028	Dalesboro Frobisher-Alida Beds Pool	35	78	2	80
230909	Dee Valley East Mannville Sands Pool	30	90	1	40
232125	Dee Valley East Sparky Sand Pool	30	90	1	40
231316	Dee Valley East Waseca Sand Pool	30	90	1	40
231310	Dee Valley Waseca Sand Pool	30	90	1	40
331046	Delta Upper Shaunavon Pool	25	93	2	80
227327	Dodsland Viking Sand Pool	35	90	1	40
335001	Dollard Lower Shaunavon Pool	25	95	2 & 4	80 & 160
331041	Dollard Upper Shaunavon Pool	5	91	2 & 4	80 & 160
230025	Druid Mannville Sands Pool	30	90	1	40
232109	Dulwich North Sparky Sand Pool	30	90	1/2	20
232102	Dulwich Sparky Sand Pool	30	90	1/4	10

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
231324	Ear Lake Waseca Sand Pool	30	90	1	40
331056	Eastbrook Upper Shaunavon Pool	20	91	2	80
330074	Eastend Shaunavon Pool	20	91	2 & 4	80 & 160
231326	Edam North Waseca Sand Pool	30	90	1	40
231320	Edam Waseca Sand Pool	30	90	1	40
230904	Edam West Mannville Sands Pool	30	90	1/2	20
232141	Edam West Sparky/G.P. Sand Pool	30	90	1/2	20
231323	Edam West Waseca Sand Pool	30	90	1/2	20
437032	Edenvale Tilston Beds Pool	40	90	2	80
435184	Elmore Frobisher Beds Pool	45	86	2	80
433018	Elmore Midale Beds Pool	35	75	2	80
433001	Elswick Midale Beds Pool	35	88	2	80
232504	Epping G.P. Sand Pool	30	90	1/2 & 1	20 & 40
232110	Epping South Sparky Sand Pool	30	90	1	40
232104	Epping Sparky Sand Pool	30	90	1/2 & 1	20 & 40
227323	Eureka Viking Pool	35	90	1	40
231208	Evesham North McLaren Sand Pool	30	90	1	40
232145	Evesham North Sparky Sand Pool	30	90	1	40
232142	Evesham Sparky Sand Pool	30	90	1	40
235002	Eyehill Cummings Sand Pool	30	90	1	40
437037	Fertile Tilston Beds Pool	40	90	1	40
437580	Fertile Tilston-Souris Valley Beds Pool	40	90	1	40
432085	Flat Lake Ratcliffe Beds Pool	35	80	2	80
435187	Florence Frobisher Beds Pool	35	75	2	80
230902	Forest Bank Mannville Sands Pool	30	90	1	40
232123	Forest Bank Sparky Sand Pool	30	90	1	40
231305	Forest Bank Waseca Sand Pool	30	90	1	40
227338	Forgan Viking Sand Pool	35	90	1	40
314541	Fosterton Roseray Sand Pool	16	95	1	40
238151	Fosterton South Cantuar Sand Pool	30	90	1	40
314554	Fosterton South Roseray Sand Pool	16	95	1	40
432090	Freda Lake Ratcliffe Beds Pool	35	90	2	80
232130	Freemont Sparky Sand Pool	30	90	1	40
231315	Freemont Waseca Sand Pool	30	90	1	40
435082	Freestone Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
437581	Frys East Tilston-Souris Valley Beds Pool	40	90	1	40
437579	Frys Tilston-Souris Valley Beds Pool	40	90	1	40
232113	Furness Sparky Sand Pool	30	90	1/4	10
441425	Fusilier Bakken Sand Pool	25	95	1	40
435009	Gainsborough Frobisher-Alida Beds Pool	30	75	2	80
435020	Gainsborough North Frobisher-Alida Beds Pool	30	75	1	40
435013	Gainsborough West Frobisher-Alida Beds Pool	30	75	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
435181	Glen Ewen Frobisher Beds Pool	35	75	2	80
433008	Glen Ewen Midale Beds Pool	35	75	2 & 4	80 & 160
230906	Golden Lake North Mannville Sands Pool	30	90	1	40
232112	Golden Lake North Sparky Sand Pool	30	90	1	40
231306	Golden Lake North Waseca Sand Pool	30	90	1	40
230908	Golden Lake South Mannville Sands Pool	30	90	1	40
232107	Golden Lake South Sparky Sand Pool	30	90	1	40
231308	Golden Lake South Waseca Sand Pool	30	90	1	40
435168	Griffin Frobisher Beds Pool	35	89	2	80
238142	Gull Lake Basal Cantuar Sand Pool	35	92	1	40
331058	Gull Lake Central Upper Shaunavon Pool	25	97	2	80
331043	Gull Lake North Upper Shaunavon Pool	25	97	1	40
331057	Gull Lake South Upper Shaunavon Pool	25	97	4	160
231307	Gully Lake Waseca Sand Pool	30	90	1	40
435761	Handsworth Alida Beds Pool	35	75	1	40
435087	Hartaven Frobisher-Alida Beds Pool	40	89	1	40
435190	Hastings East Frobisher Beds Pool	35	75	2	80
435177	Hastings Frobisher Beds Pool	35	75	1 & 2	40 & 80
435160	Hastings West Frobisher Beds Pool	35	75	2	80
437029	Hazelwood South Tilston Beds Pool	40	90	2	80
437027	Hazelwood Tilston Beds Pool	40	90	1	40
437028	Hazelwood West Tilston Beds Pool	40	90	1	40
314548	Hazlet Roseray Sand Pool	21	94.7	1	40
441430	Hearts Hill Bakken Sand Pool	25	95	1	40
232515	Hillmond G.P. Sand Pool	30	90	1	40
232115	Hillmond Sparky Sand Pool	30	90	1	40
432094	Hoffer Ratcliffe Beds Pool	35	80	2 & 4	80 & 160
441424	Hoosier Bakken Sand Pool	25	95	1	40
435167	Hume Frobisher Beds Pool	35	89	2	80
433091	Hume Midale Beds Pool	35	89	2 & 4	80 & 160
441478	Hummingbird Bakken Sand Pool	25	95	2	80
521029	Hummingbird Birdbear Pool	25	83	2	80
432088	Hummingbird Ratcliffe Beds Pool	25	75	2	80
435163	Huntoon Frobisher Beds Pool	50	89	2	80
	(East Group)	35	89	2	80
433079	Huntoon Midale Beds Pool	50	89	2 & 4	80 & 160
331054	Illerbrun Upper Shaunavon Pool	15	94	4	160
435003	Ingoldsby Frobisher-Alida Beds Pool	35	89	1	40
435042	Ingoldsby West Frobisher-Alida Beds Pool	35	75	1	40
435165	Innes Frobisher Beds Pool	35	89	2	80
331049	Instow Upper Shaunavon Pool	5	94	2	80
238150	Java Cantuar Sand Pool	30	90	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
331042	Johnston Upper Shaunavon Pool	25	97	1	40
437016	Kenosee Tilston Beds Pool	40	90	2	80
227342	Kerrobert Viking Sand Pool	35	90	1	40
521034	Kisbey Birdbear Pool	40	75	2	80
435025	Kisbey Frobisher-Alida Beds Pool	26	80	2	80
432086	Lake Alma Ratcliffe Beds Pool	35	80	2	80
231201	Landrose McLaren Sand Pool	30	90	1/2 & 1	20 & 40
231301	Landrose Waseca Sand Pool	30	90	1/2 & 1	20 & 40
232129	Lashburn South Sparky Sand Pool	30	90	1	40
231314	Lashburn South Waseca Sand Pool	30	90	1	40
231303	Lashburn Waseca Sand Pool	30	90	1	40
232137	Lashburn West Sparky Sand Pool	30	90	1	40
330047	Leitchville Shaunavon Pool	35	90	2 & 4	80 & 160
330048	Leon Lake Shaunavon Pool	25	90	4	160
437023	Lightning Tilston Beds Pool	40	90	1	40
232124	Lloydminster Sparky Sand Pool	30	90	1/2	20
232103	Lone Rock Sparky Sand Pool	30	90	1/4	10
435073	Lost Horse Hill Frobisher-Alida Beds Pool	45	89	1	40
433081	Lougheed Midale Beds Pool	35	89	2	80
240024	Loverna Detrital Pool	25	75	1	40
231302	Low Lake Waseca Sand Pool	30	90	1/2	20
227335	Lucky Hills Viking Pool	35	90	1 & 2	40 & 80
441432	Luseland Bakken Sand Pool	25	95	1	40
232126	Macklin Sparky Sand Pool	30	90	1	40
433095	Macoun Midale Beds Pool	35	89	4	160
433069	Macoun West Midale Beds Pool	40	89	4	160
231205	Maidstone McLaren Sand Pool	30	90	1	40
231322	Maidstone Waseca Sand Pool	30	90	1	40
314543	Main Success Roseray Sand Pool	30	93	1	40
231210	Manito Lake East McLaren Sand Pool	30	90	1	40
232143	Manito Lake Sparky Sand Pool	30	90	1	40
232138	Marsden South Sparky Sand Pool	30	90	1	40
232105	Marsden Sparky Sand Pool	30	90	1/4	10
435080	Melrose Frobisher-Alida Beds Pool	45	89	1	40
435161	Midale Central Frobisher Beds Pool	50	89	2	80
433072	Midale Central Midale Beds Pool	50	89	2	80
433070	Minard Midale Beds Pool	35	89	4	160
437014	Moose Mountain Tilston Beds Pool	40	90	1	40
437077	Moose Valley South Tilston Beds Pool	40	90	2	80
437076	Moose Valley Tilston Beds Pool	40	90	1	40
435031	Morrisview Frobisher-Alida Beds Pool	35	80	2	80
231203	Neilburg McLaren Sand Pool	30	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
432092	Neptune Ratcliffe Beds Pool	35	80	4	160
433026	North Antler Midale Beds Pool	35	75	2	80
435762	North Handsworth Alida Beds Pool	35	75	2	80
441423	North Hoosier Bakken Sand Pool	25	95	1	40
239021	North Hoosier Basal Blairmore Sand Pool	25	90	1/2	20
314542	North Premier Roseray Sand Pool	25	93	1	40
331044	North Premier Upper Shaunavon Pool	25	93	1 & 2	40 & 80
441433	North Smiley Bakken Sand Pool	25	93	1	40
435185	Northgate Frobisher Beds Pool	35	75	4	160
433020	Northgate Midale Beds Pool	35	75	2	80
232509	Northminster North G.P. Sand Pool	30	90	1	40
232134	Northminster North Sparky Sand Pool	30	90	1	40
232108	Northminster Sparky Sand Pool	30	90	1	40
435780	Nottingham Alida Beds Pool (Non-Unit)	35	75	1 & 2	40 & 80
	(Unit)	22	75	2	80
331074	Notukeu Upper Shaunavon Pool	25	75	4	160
435178	Oakley Frobisher Beds Pool	35	75	2	80
432083	Oungre Ratcliffe Beds Pool	35	80	1 & 2	40 & 80
438022	Parkman Souris Valley Beds Pool	50	90	2	80
437578	Parkman South Tilston-Souris Valley Beds Pool	40	90	2	80
437013	Parkman Tilston Beds Pool	40	90	1	40
437576	Parkman Tilston-Souris Valley Beds (Tilston)	40	90	1	40
	(Souris Valley)	50	90	1	40
331061	Pennant Upper Shaunavon Pool	25	95	2	80
232507	Pikes Peak G.P. Sand Pool	30	90	1	40
232128	Pikes Peak Sparky Sand Pool	30	90	1	40
231312	Pikes Peak Waseca Sand Pool	30	90	1	40
435182	Pinto Frobisher Beds Pool	35	75	1 & 2	40 & 80
433015	Pinto Midale Beds Pool	35	75	2	80
227340	Plato North Viking Pool	35	90	1	40
227333	Plato Viking Pool	35	90	1	40
227345	Plenty Viking Sand Pool	35	90	1	40
441427	Plover Lake Bakken Sand Pool	25	95	1	40
231209	Plover Lake McLaren Sand Pool	25	95	1/2 & 1	20 & 40
227343	Prairiedale Viking Sand Pool	35	90	1	40
435010	Queensdale East Frobisher-Alida Beds Pool	35	85	1	40
435782	Queensdale North Alida Beds Pool	35	75	1	40
435781	Queensdale West Alida Beds Pool	35	75	1	40
433097	Ralph Midale Beds Pool	35	89	2	80
433005	Ralph West Midale Beds Pool	35	89	2	80
331045	Rapdan Upper Shaunavon Pool	20	91	2 & 4	80 & 160
330063	Rapdan West Shaunavon Pool	20	91	4	160

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
354902	Red Jacket Gravelbourg Pool	38	98	2	80
336501	Red Jacket Shaunavon-Gravelbourg Pool	38	98	1	40
441476	Rocanville Bakken Sand Pool	35	75	1	40
441477	Roncott Bakken Sand Pool	25	94	2	80
435779	Rosebank Alida Beds Pool	35	79	1	40
435778	Rosebank South Alida Beds Pool	35	79	1	40
230905	Rush Lake Mannville Sands Pool	30	90	1	40
232140	Rush Lake Sparky Sand Pool	30	90	1	40
231321	Rush Lake Waseca Sand Pool	30	90	1	40
234142	Salt Lake Lloydminster Sand Pool	30	90	1	40
234139	Senlac Lloydminster Sand Pool	30	90	1	40
435164	Sherwood Frobisher Beds Pool	35	86	1 & 2	40 & 80
232101	Silverdale Sparky Sand Pool	30	90	1/4 & 1/2 & 1	10 & 20 & 40
435179	Silverton Frobisher Beds Pool	35	75	2	80
432096	Skinner Lake Ratcliffe Beds Pool	35	80	2 & 4	80 & 160
227023	Smiley-Dewar Viking Pool	35	90	1	40
435186	Souris Flat Frobisher Beds Pool	35	75	2	80
437002	South Fletwode Tilston Beds Pool	40	90	1	40
314545	South Success Roseray Sand Pool	30	93	1	40
231311	Standard Hill Waseca Sand Pool	30	90	1	40
435001	Star Valley Frobisher-Alida Beds Pool	35	81	1	40
435176	Steelman Frobisher Beds Pool	35	75	2	80
433004	Steelman Midale Beds Pool	35	72	2	80
436276	Storthoaks Alida-Tilston Beds Pool (Alida)	35	79	2	80
	(Tilston)	40	90	2	80
435078	Stoughton Frobisher-Alida Beds Pool	35	86	2	80
435171	Stoughton South Frobisher Beds Pool	35	86	2	80
314551	Success North Roseray Sand Pool	30	93	1	40
314544	Success Roseray Sand Alpha Pool	30	93	1	40
314549	Suffield Roseray Sand Pool	35	95	1 & 2	40 & 80
331052	Suffield Upper Shaunavon Pool	25	97	2	80
543004	Tableland Winnipegosis Pool	19	73	4	160
231204	Tangleflags East McLaren Sand Pool	30	90	1	40
232505	Tangleflags G.P. Sand Pool	30	90	1	40
234121	Tangleflags Lloydminster Sand Pool	30	90	1	40
230901	Tangleflags Mannville Sands Pool	30	90	1	40
231206	Tangleflags McLaren Sand Pool	30	90	1	40
232506	Tangleflags North G.P. Sand Pool	30	90	1	40
234128	Tangleflags North Lloyd/Cummings Sand Pool	30	90	1	40
232114	Tangleflags Sparky Sand Pool	30	90	1	40
232508	Tangleflags West G.P. Sand Pool	30	90	1	40

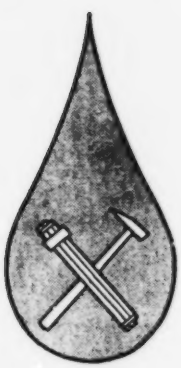
MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
234132	Tangleflags West Lloydminster Sand Pool	30	90	1	40
230901	Tangleflags West Mannville Sands Pool	30	90	1	40
231207	Tangleflags West McLaren Sand Pool	30	90	1	40
232131	Tangleflags West Sparky Sand Pool	30	90	1	40
433098	Tatagwa Midale Beds Pool	35	92	1 & 2	40 & 80
433088	Tatagwa North Midale Beds Pool	35	92	2	80
227321	Verendrye Viking Sand Pool	35	90	1	40
314547	Verlo Roseray Sand Pool	21	90	2	80
435170	Viewfield Frobisher Beds Pool	35	86	1	40
433071	View Hill Midale Beds Pool	50	89	2	80
238661	Wapella Sand Pool	25	99	1	40
435784	Warmley Alida Beds Pool	35	90	2	80
436277	Wauchope Alida Tilston Beds Pool	35	75	1	40
437003	Wauchope North Tilston Beds Pool	40	90	1	40
435169	Weir Hill Frobisher Beds Pool	35	75	2	80
435166	West Innes Frobisher Beds Pool	35	89	2	80
433077	West Kingsford Midale Beds Pool	35	83.6	2	80
232510	Westhazel G.P. Sand Pool	30	90	1	40
232136	Westhazel Sparky Sand Pool	30	90	1	40
435162	Weyburn Frobisher Beds Pool	35	89	2	80
433074	Weyburn Midale Beds Pool	35	89	2	80
	(Northern Portion of Pool)	50	89	2	80
437012	White Bear Tilston Beds Pool	40	90	1	40
437577	White Bear Tilston-Souris Valley Beds (Tilston)	40	90	1	40
	(Souris Valley)	50	90	1	40
330075	Whitemud Shaunavon Pool	20	91	4	160
227326	Whiteside Viking Sand Pool	40	91	1	40
435783	Wildwood Alida Beds Pool	35	75	2	80
435011	Willmar Frobisher-Alida Beds Pool	25	78	1 & 2	40 & 80
435188	Winmore Frobisher Beds Pool	45	85	2	80
235007	Winter Cummings Sand Pool	30	90	1	40
435012	Wordsworth Frobisher-Alida Beds Pool	35	75	2	80
435183	Workman Frobisher Beds Pool	35	84	2	80
433017	Workman Midale Beds Pool	35	79	2	80

* Factors in effect on June 1, 1990

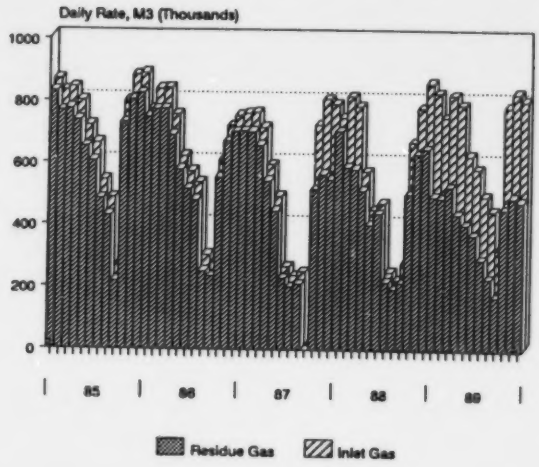
GAS PLANT

PERFORMANCE GRAPHS

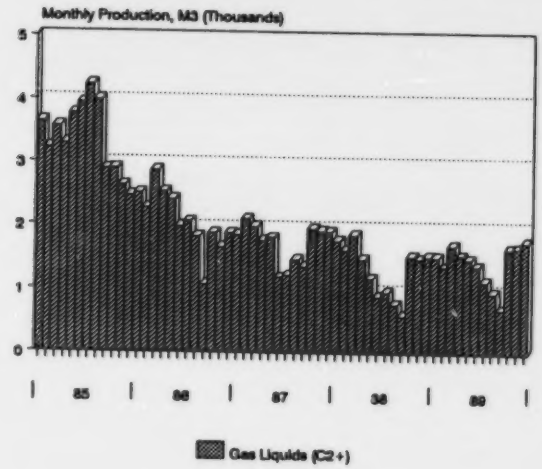


COLEVILLE GAS PLANT

Average Daily Inlet and Residue Gas

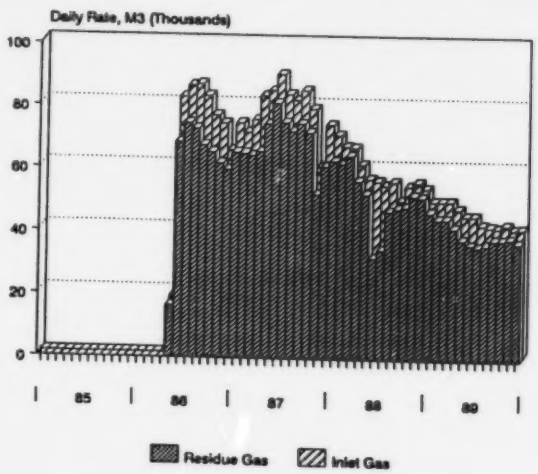


Monthly Gas Liquids (C2+) Production

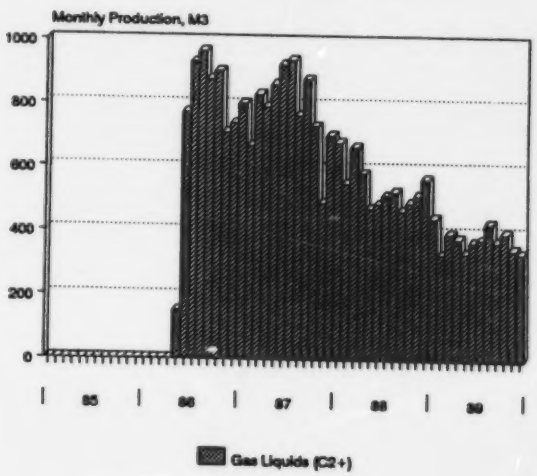


COLEVILLE (WESTAR) GAS PLANT

Average Daily Inlet and Residue Gas

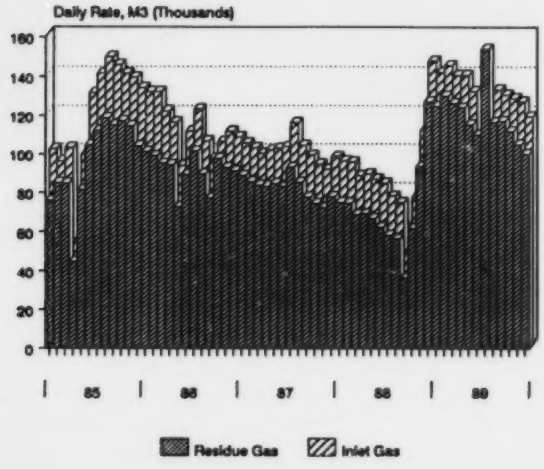


Monthly Gas Liquids (C2+) Production

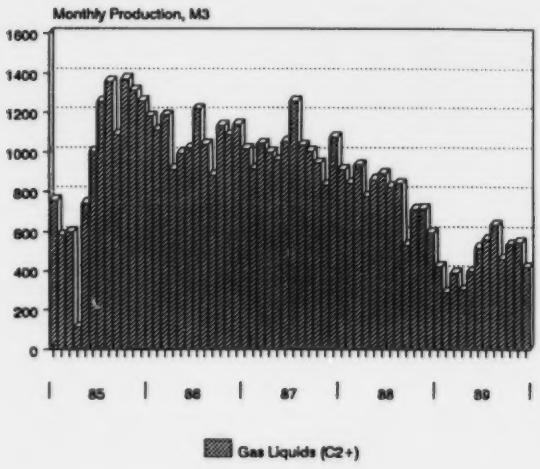


DODSLAND GAS PLANT

Average Daily Inlet and Residue Gas

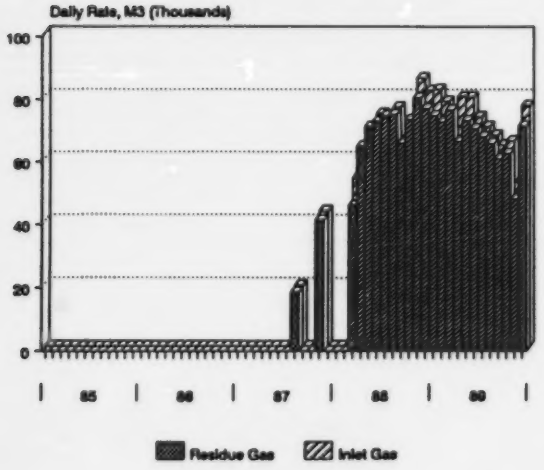


Monthly Gas Liquids (C2+) Production

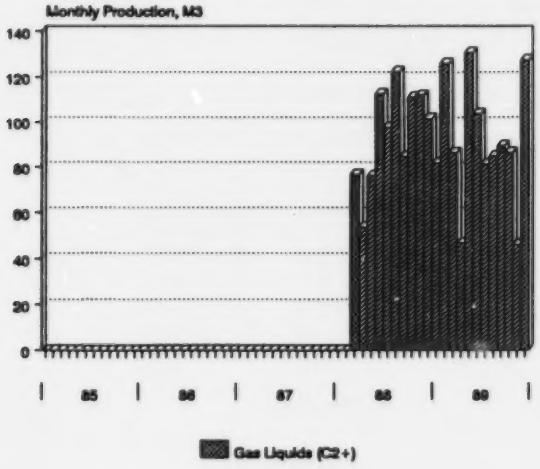


DODSLAND (PRODUCERS) GAS PLANT

Average Daily Inlet and Residue Gas

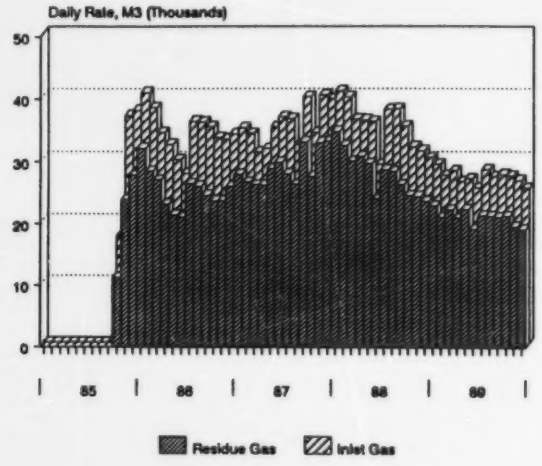


Monthly Gas Liquids (C2+) Production

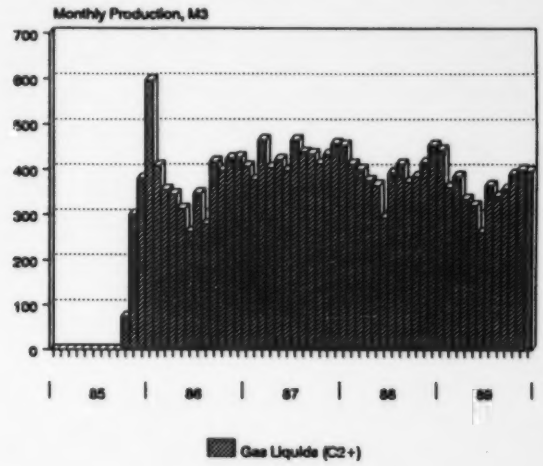


KERROBERT GAS PLANT

Average Daily Inlet and Residue Gas

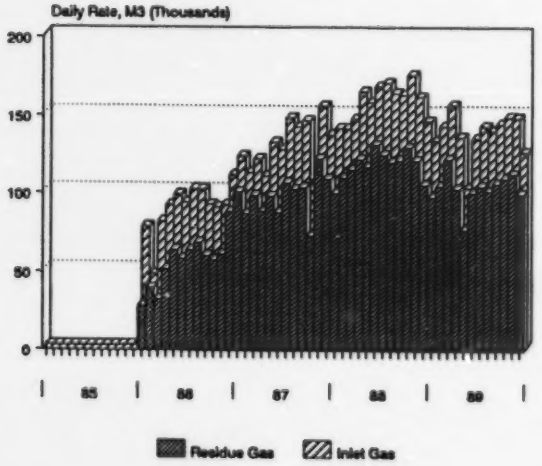


Monthly Gas Liquids (C2+) Production

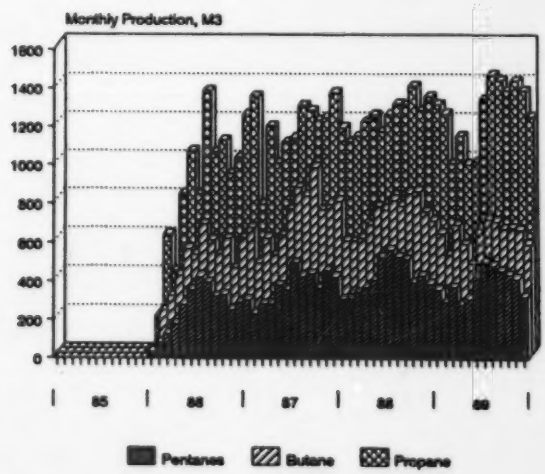


NOTTINGHAM GAS PLANT

Average Daily Inlet and Residue Gas

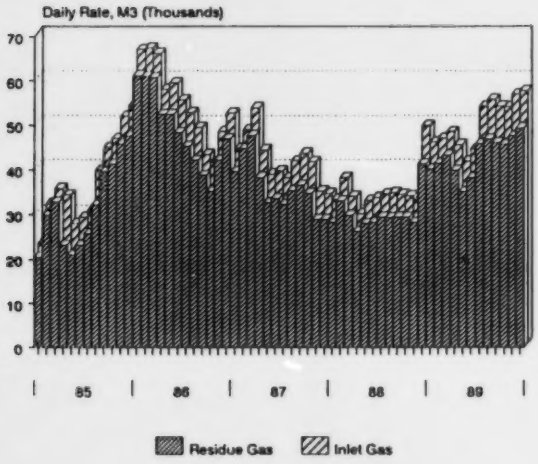


Monthly Gas Liquids Production

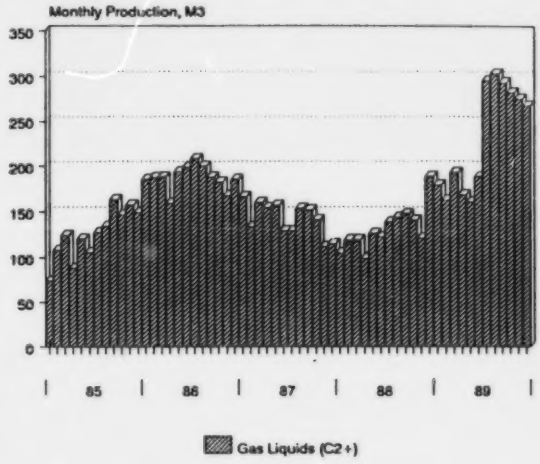


SMILEY (ALLHEART) GAS PLANT

Average Daily Inlet and Residue Gas

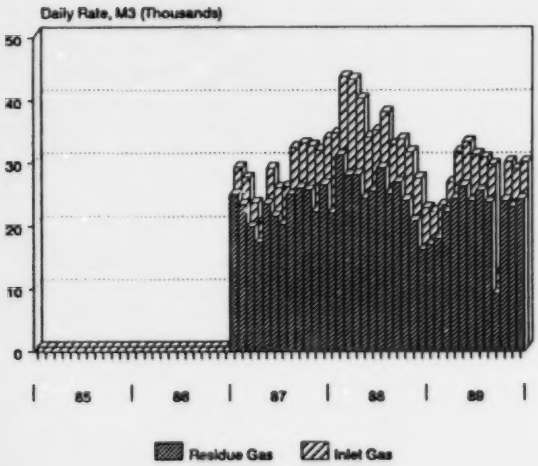


Monthly Gas Liquids (C2+) Production

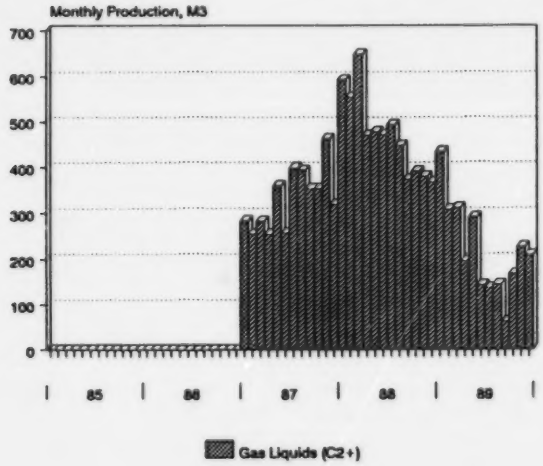


SMILEY (ANTELOPE) GAS PLANT

Average Daily Inlet and Residue Gas

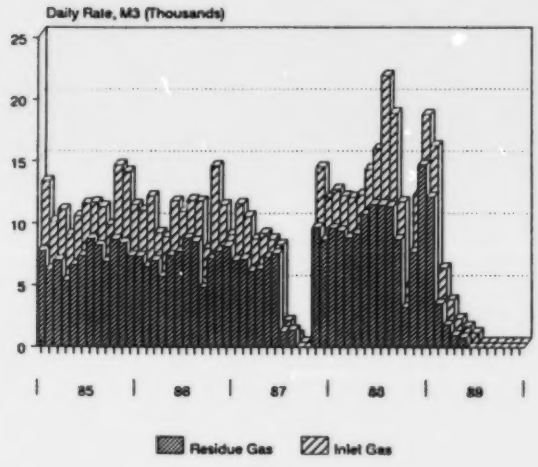


Monthly Gas Liquids (C2+) Production

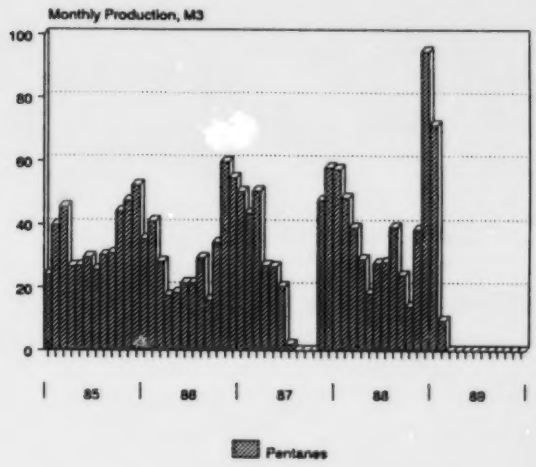


SMILEY (ESSO) GAS PLANT

Average Daily Inlet and Residue Gas

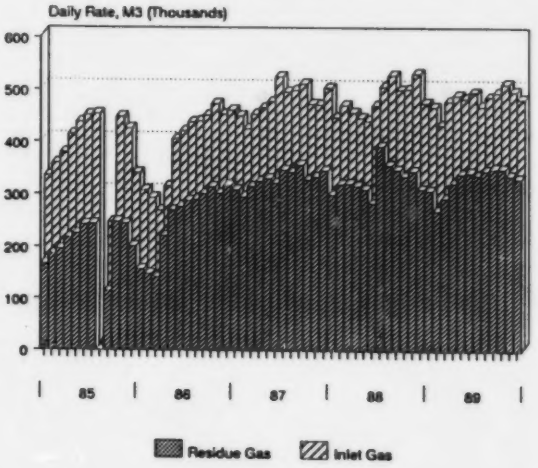


Monthly Pentanes Production

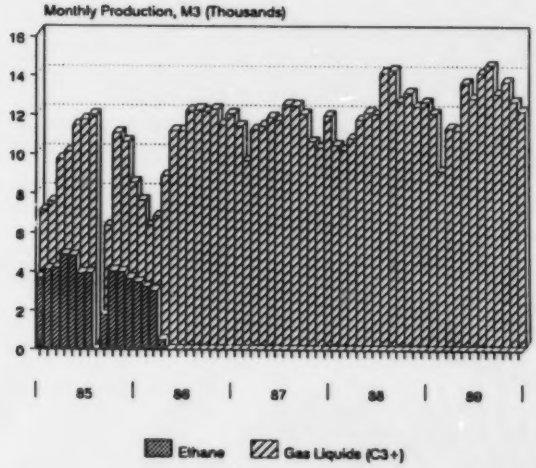


STEELMAN GAS PLANT

Average Daily Inlet and Residue Gas

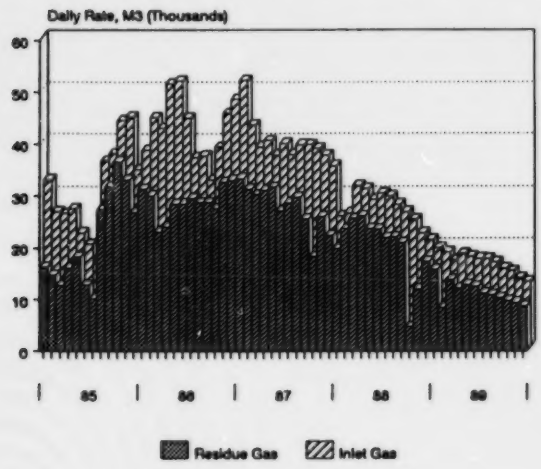


Monthly Gas Liquids Production

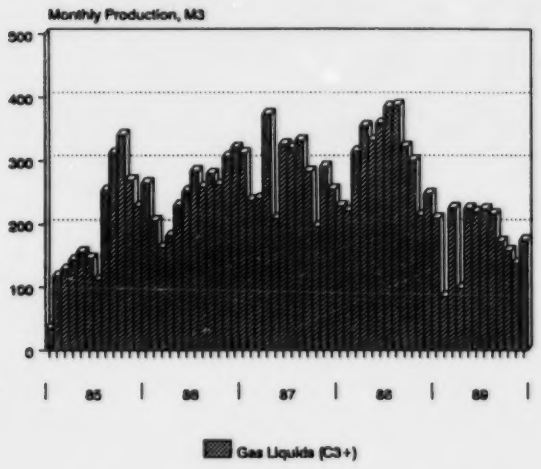


STEELMAN NORTH GAS PLANT

Average Daily Inlet and Residue Gas

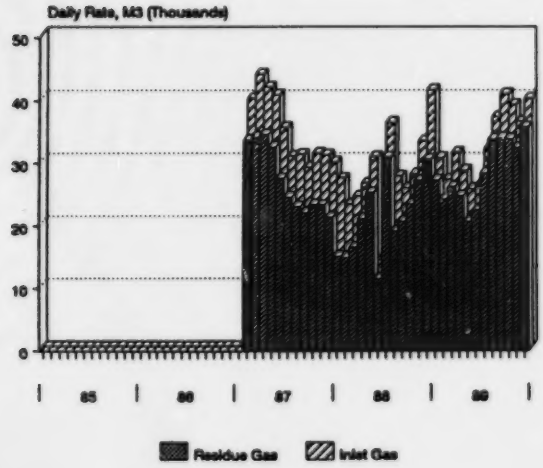


Monthly Gas Liquids (C3+) Production

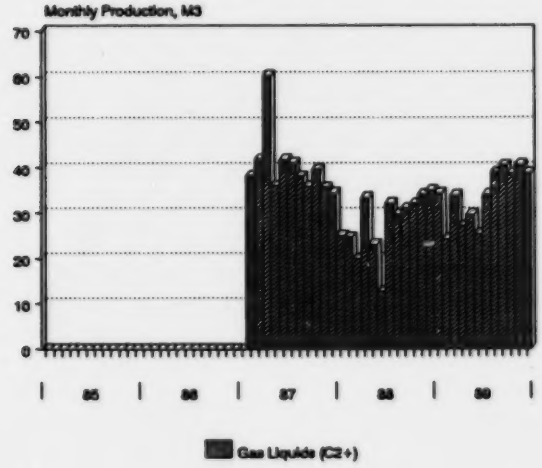


WEST GULL LAKE GAS PLANT

Average Daily Inlet and Residue Gas



Monthly Gas Liquids (C2+) Production



ISSN 0707-2562

Petroleum and Natural Gas Division

1914 Hamilton Street
Regina, Saskatchewan
S4P 4V4
Telecopier/Fax: (306) 787-2478 or 787-7338
Executive Director: B. W. Wilson, P.Eng.
Ph. (306) 787-2591

Engineering Services Branch

Director: M. A. Sereda, P.Eng.
Ph. (306) 787-2318

Petroleum Development Branch

Director: J. L. Gossard
Ph. (306) 787-2593

Field Offices

Estevan – 1219 Fifth Street S4A 0Z1
Officer in Charge: J. M. Wysminity
Ph. (306) 634-0751
Telecopier/Fax: (306) 634-0756

Swift Current – 350 Cheadle Street West S9H 4G3
Officer in Charge: A. R. Dafoe
Ph. (306) 778-8252
Telecopier/Fax: (306) 778-8256

Kindersley – Box 850 S01 1S0
Officer in Charge: D. Monuik
Ph. (306) 463-2523
Telecopier/Fax: (306) 463-6650

Lloydminster – 4815 - 50th Street S9V 0M8
Officer in Charge: B. Mathieson
Ph. (306) 825-8977
Telecopier/Fax: (306) 825-3202